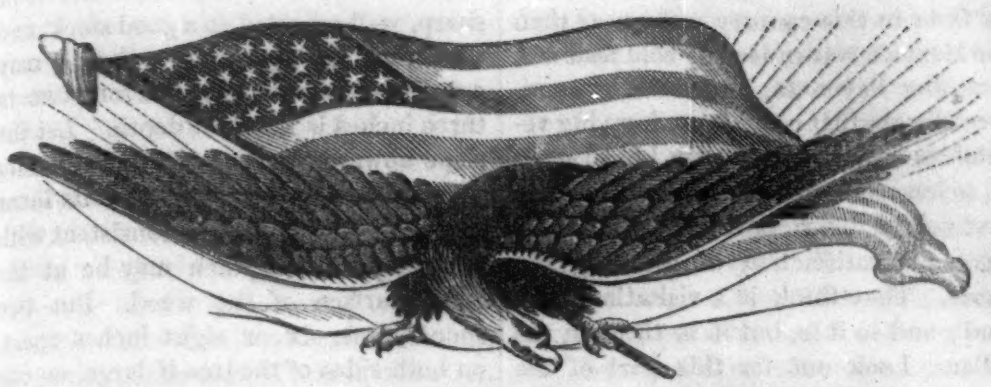

AMERICAN FARMERS' MAGAZINE.

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Agricultural.

HINTS FOR YOUNG FARMERS.

MARCH is an active month in the south; and at the north even, nature begins to wake up and call the farmer forth from his winter quarters. During the previous month, little could be earned, but much could be saved by a careful husbanding of the last year's crops. We suppose you have been using the hay-cutter, by hand, or horse, or steam power, as you found most economical for the extent of your farm operations; that each bushel of feed, or each ton of fodder, from the best of June-cut hay down to the poorest of straw has, by a proper mixture of food, and by giving the right kinds to each animal, been made to tell for its whole worth, be that large or small; and that your stock are coming out at a little cheaper rate and in a little better condition than results from careless feeding.

If it is so, then keep on in the same way, and not lose in March what you gained in February. There is more than fifty per cent difference in the profits of wintering stock in the worst way and the best. Some would allow us to say one hundred per cent, and would justify the opinion by saying that, taking one year with another, there is a fair profit in wintering in the right way, but none in wintering in the wrong way, because the feed in this way is worth more in the fall than the increased weight of the animal in the spring. At any rate it is safe to say that a farmer may almost as well not have crops, as not to expend them with care and good judgment.

Let the stock be gaining this month, and then again in April, and for whatever stock you have for summer beef, the butcher will be paying you the cash in June or July. That farmer generally gets the advantage who has his summer beef ready for the market earliest. It gives him the quickest return; it enables him to have plenty of feed in autumn, and it gives him an opening for other animals when they can be bought to advantage.

Do not fail to air the cellar, and to keep it sweet and clean. Not a particle of decaying vegetable matter should remain; and the windows should be open as much as consists with safety from frosts. Let the housewife see to this. She should remember that close cellars, unventilated, except so far as they steam through the door into the kitchen or

other occupied rooms, cause more deaths by fever in this country every year than the Mexican war caused by cold lead and gleaming bayonets; and what is more, these fevers that come from decaying vegetables in an impure cellar, kill so slowly, so long time after the poison is inhaled, that neither the victims nor their friends have the satisfaction of knowing the cause. They think it a visitation from God; and so it is, but it is through the cellar. Look out for this part of the premises, in March and April and May, and then keep looking out for it as you value life and health. If there are not windows on the opposite sides of your cellar for the wind to drive through, so as to purge the air of effluvia from decaying vegetables that may have escaped the notice of even the neatest housekeeper, make them before this month goes out. Whether the sash slides or swings, have it so that it may easily be fastened wide open, partially open, or closed; and our word for it (and every sensible doctor in the land will tell you so) you will have removed a most prolific cause of lingering disease and premature death.

"The maids along the Ohio sing,
Of all the seasons in the year,
The sweetest season is the Spring."

So sang an Ohio bard thirty years ago—one, we suppose, who wanted the Yankees to come out there and buy his land, and so would have them understand that the maples there were abundant, and the lasses and molasses peculiar sweet, in both of which we suspect he was right, inasmuch as, in a new country as that was then, the girls are not as apt to be spoiled of health and merry mood by conventional usages against nature, and certainly no sweet, except that of maiden simplicity and worth, is equal to the flow from the sugar maple.

March is the time, and we must say a few words about making maple sugar. In tapping the trees, use a three-quarter bit, or one about that size. Let it be sharp, well adjusted to a good stock, and then turn it very rapidly, that it may cut the wood smoothly. From two to three inches is the best depth. Let the slope upwards be about 10°, less rather than more. Let the spout at its inner end taper as much as is consistent with firmness, that the pinch may be at the outer surface of the wood. Put two spouts, four, six or eight inches apart, on both sides of the tree if large, on one side only if small. The projecting ends should converge a little, that both may drop so near the center of the tub as not to allow the wind to blow the sap away as it falls. It is well to have the part from which the sap falls blunt, not pointed. The sap will then separate from it in large drops, and not be as liable to be blown outside of the tubs. It is a common practice, and a good one, to hang the tub on a nail driven into the tree, in such a way as to prevent the possibility of loss by wind. We never saw it done, but should think it would be well to fasten the tub by a cord drawn around the tree, as this would hold the tub as well, and would prevent the necessity of puncturing the tree, by which a small waste of sap is caused, and the tree slightly injured. Some hang the tub by means of a wire bail on the two spouts. This is a good way. The spouts should be notched where the bail is to pass across them.

The sap should be boiled soon after being collected, as otherwise, especially in warm weather, an incipient fermentation takes place, and the sugar crystalizes less perfectly. We have often made batches of maple sugar in April which would hardly crystalize at all, owing to this incipient fermentation in the sap. The molasses, in such a case, is of an inferior quality, not having that luscious maple taste which everybody loves. There are many varieties of sugar, of which cane-sugar and grape-sugar are the leading. The maple gives essenti-

ally the cane sugar, with that exquisite maple flavor. We believe that when the sap stands too long before boiling, the constitution of the sugar is changed from that of the cane to that of the grape; and, in the change, the maple flavor, as well as the tendency to crystalize, is partially lost.

We could write all day, and detail only our own experience in this matter, for fortunately we were *brought up* in the backwoods, the best thing that ever happened to us, and these woods were remarkably sweet in more senses than one. But we will only say, use your own good sense in your arrangements for boiling economically of fuel. We have seen some people boil down maple sap when we would have valued the fuel more than the sugar. Done economically, it is a fairly paying business for a season when other work does not press.

The sap should be kept clean. Let the kettles or the pan be so set that no sparks will blow into them. When the syrup is partially cooled, strain slowly through a thick cloth; and in *suguring off*, as it is called, let the heat be equable, that no burning on the sides of the kettles may blacken the mass. Nearly every impurity in maple sugar is occasioned by uncleanliness in collecting and boiling the sap, or by burning on the sides of the kettle. If the sap could be kept of that limpid pureness with which it comes from the tree, no straining nor clarifying would be needful, and you would have the purest sweet that nature affords. But as this is not possible, it is well to strain the sap through cloth before boiling, then to strain the syrup before sugaring off, and in both cases woollen cloth, of a pretty close texture, is best; and as even this will not separate every particle, it is well to put in a little milk—say one pint to 20 lbs. of sugar—and skim. The milk curdles; the particles remaining become entangled in it and are skimmed off.

We might say much about clarifying with bullock's blood, with the blood and bristles where hogs have been slaughtered, with a thousand other things, making the remedy worse than the disease; but it is all humbug. If you will boil clean, and add a little milk to the syrup, you will have as good an article as can be made. There will be a little color, more than in double refined sugar, but what of that. Those Ohio girls, thirty years ago, probably had a little color in the face and lips, but were none the worse for it.

Before this month expires, many of our readers will be speeding the plow. Shall we say, plow deep? Yes; but what is deep? One says six inches, another two feet. How extravagant these agricultural papers are, and how they differ, say some. We say no certain rule can be laid down for all cases. How land is to be manured, how it is to be tilled, its annual value, whether it is underdrained, and what is the composition and structure of the soil, are preliminary questions.

1. How is the land to be manured? If you have but ten loads of manure for the acre, and can get no more at paying rates, it would be folly to plow much deeper than before. But says some one, if you have no more than that, till but one-third as much, and make it hold out thirty loads to the acre. Hold friend; your advice is good enough for the farmers to think of, but let them think a good while before they follow it in all cases. As a general thing, less land under the plow, higher manuring and maximum crops, is good advice. But there is a great deal of land, that in the present state of the country, can not be so manured and tilled as to give 100 bushels of corn to the acre, or 30 bushels of wheat, or 3 tons of hay, which may better be cultivated for half these figures than turned over to no use. Undoubtedly, with a population of but ten to the square mile, giving 64 acres to each person, it is wise to cultivate some acres for

half the crop that would be sought by a population twenty-five times as dense. The way to do it is to plow but slightly deeper than the land has been plowed before, to manure as well as you can, to stir often, practice clean cultivation, and be contented with moderate crops and small profit.

2. How the land is to be tilled. Here, if the objector says, it is to be tilled well or not at all, we have not much to say. Still in a country where labor is plenty and cheap, but land scarce and dear, more careful weeding, and a more frequent stirring of the soil is advisable than in one where the reverse is true; and in our own country there are some who *will* have a neat, clean, oft-stirred soil; and where a farmer is bent on this course, he may plow the same land, with the same amount of manure, deeper than another who means to only half till it through the summer, because the first, by keeping his field clear of weeds and often stirred to let in the sun and air to warm and enliven his soil, will get paid for the extra expense of deep plowing, while most assuredly the second will not. The fact is shallow plowing is a part and parcel of bad farming throughout; and if all the rest is bad, that may about as well be bad also. As we would patch an old garment with old cloth, or wear an old vest if our coat and pants were very old, so we would recommend shallow plowing, as a part of a husbandry, of which all the rest is to be bad.

3. The annual value of land. If you pay $100 an acre for the use of land, as is done by some of our market gardeners, the cultivation must be good throughout or you can not get your money back. It would be only penny-wise to shrink from an extra expense of 3, or 5, or 10 dollars an acre to deepen the soil. But if you hire land at $2 an acre, it might be wise to cultivate in a cheaper way. In the one case you would want to plow deep enough to make two acres of one; in the other you might be contented with letting two acres go as one, that is, with half the crop which such land really ought, if it were in other locations, to produce.

4. Has the soil been underdrained? If so, it will better pay for deep plowing. One effect of underdraining is, by taking out the water to let in the air. This warms the soil. You need not fear to plow deep. Your crops are not in danger of being chilled by the turning up of soil that has long been hid from the sun. Unquestionably underdrained lands will bear deep plowing with less manure than lands that are not underdrained. Of course, we mean such lands as require uuderdraining.

5. The nature of the soil. There are lands which will not bear deep plowing. They are rare, but they do exist. Two things are necessary to a decision that deep plowing must not be adopted; one that the land consists of a thin soil, lying on coarse gravel, the other that it be located where there is nothing to give a special value to its products. We have seen such land. To plow through the subsoil, would be like knocking the bottom out and letting the whole fall through. The best thing that can be done with this land is to run over it and get two or three small crops once in five years. The cost is but trifling. A cheap dressing of ashes and a little plaster will give fifteen or twenty bushels of corn, and a small crop of clover the second year, with a little pasturage the third. But say some, these are the very lands to plow deep. They would let in the plow to the beam, would subsoil, mix in the fine top soil with the coarse gravel below, put on plenty of manure, and thus make a pretty solid compact soil of it. Aye, that can be done. Money enough and labor enough will make good land of any thing. That would be good advice if such land lay in the suburbs of New-York, or any where else where it would be worth a thousand dollars an acre when made good, and

rent for a hundred dollars a year. There is land on Long Island, of just this character, and which should be treated in just this way—*made good* at a great expense. There are more than a hundred thousand acres on Long Island so situated and of such a character, that $100 an acre expended on them would make them worth $200 an acre more than they can now be bought for. Of course the man of small capital can not touch them. The man of large capital will not, though it would be one of the prettiest operations in the world, and so they are a wilderness, within three hours of this metropolis.

But we were speaking of such land, so situated that it would not repay a large outlay, and we are very sure there is such, and that the best use for it, as we have already said, is to grow small crops at a small expense.

Undrained lands, with an impervious subsoil, will not bear deep plowing. The soil is too cold to be turned up. Some land of this kind will even give better crops with shallow than with deep plowing. The way is, first to underdrain, and then to plow deep. But do all lands require underdraining? We might just as well be told that all coats need scouring, the unsoiled as well as the soiled.

If the water passes down freely, so as never to accumulate and become stagnant, that is enough, and such is the case with more than half the land we have yet seen. Lands that are cold and sour by reason of stagnant water, or by its too slow passage through them, are doubled, quadrupled, and sextupled in value by underdraining; but the majority of acres in this country, so far as we have seen, would not produce enough more to pay the cost.

None too much is said in our agricultural journals in favor of deep plowing, but in our opinion it is said too indiscriminately. A consequence is, that some farmers are rushing into the depths without knowing the why and wherefore; while others know, or think they do, too well to be instructed, that all this talk about deep plowing is only a piece of modern tom-foolery.

To the young farmer we would say, if you can not manure highly, if you do not mean to cultivate well, if your land lies so far from a good market that its annual value is small, if it needs draining but is not drained, if it has a thin soil lying on a treacherous subsoil, be cautious in any of these cases how you plow much deeper than you have seen the substantial old farmers plow.

But if none of these causes prevent, if you mean to manure highly and till well, especially if your land is so situated with reference to markets as to possess a high annual value, if you mean to make something by farming, and are as willing to be paid in the increased value of your land as in money returns, then put in the plow eight, ten, or twelve inches deep, if you are growing the staple products far back in the country, and twice those depths if your are growing fruits and vegetables near a large city.

The soil of an acre, one foot in depth, weighs, in a moist state, all of 2,000 tons. It costs something to stir, hustle about and mix so much soil, but it will pay. If you do it in all the cases where we have recommended, and abstain in all others, we think you will have nothing to regret.

We have tried to be discriminate and to recommend nothing which a young farmer, or any other, might not follow with safety.

THE CATTLE OF NEW-ENGLAND.

The red cattle of New-England came over with the emigrants from England and Wales, and other countries in Europe.

The first emigrants or settlers in New-England came in colonies from the different regions or counties in England—

each emigration generally brought over with them their first stock of neat cattle. If a Pilgrim or emigrant had a favorite cow for milk, butter or cheese, he brought along the favorite animal as a *household god;* and when the governor of the clan started with the embarkation, he had the best bull of the shire selected to perpetuate the stock in the new world. Thus a superior stock of cattle, embracing the best from all parts of the mother country, and containing all the known different races, were landed in the New-England settlements when they first located. From all these fountains has arisen a new and peculiar stock of cattle in New-England, unlike any other ever known in the old world. The herds of New-England show strains from the very best stocks from England, Scotland, Ireland and Wales, as well as from Holland and the northern and western departments of France, and some other countries on the continent of Europe.

VARIETIES OF CATTLE IN ENGLAND.

In England from the earliest times it is said that three distinct races of cattle were found, and now several other races have been brought into the country.

1. The Long-horns. These were originally from Cumberland, Lancashire, Northumberland, and other high regions in the north of England. The old Craven bull was a type of this stock, and looked upon as the best. The race has also been spread over Ireland, in Tipperary, Limerick, Munster, and other counties. The breed has been greatly crossed and modified from the original. The first races were remarkable for the enormous length and bulk of the horns, and were large, strong and hardy. The general form rather coarse, limbs large and bony. But the cows yielded milk remarkable for its richness.

2. The Devonshires, Herefords, Welsh, and the Scotch Highland cattle. The horns of these cattle are of moderate size, fine, well turned, sharp pointed, limbs clean, animated countenance, figure compact, fatten readily. The cows yield rich milk, and are known as middle-horned cattle.

3. The Galloway and Angus ox, which were hornless, and are called polled cattle. The original country of this race is situated in the extreme south and western part of Scotland, next to the Irish Channel. The majority of this race of cattle are black, but I have seen some of a deep blood bay color. Vast numbers of these cattle are driven to Norfolk and Suffolk counties in England, and are fed for the London market, where they are highly esteemed for beef. It is this race which has been crossed on the native cattle of Norfolk and Suffolk, and have produced one of the best stocks in England. A cross breed is of a dun color. Another cross seems to have been made with the white Chillingham Park cattle, which are also found in Northumberland, Lancashire, Yorkshire, and Cheshire counties. The legs of this cross are mottled more or less with black, the roof of the mouth and tongue are spotted with black.

4. The Alderney cattle are known to be of a French origin, and are not one of the original races in England. The islands on the south of the English Channel, next to the coast of France, are called Jersey, Geurnsey, and Alderney. The Normandy and Alderney cattle were at an early day bred in Sussex, Hampshire, and other counties in England along the coast opposite to France. Inland the stock was much crossed on the English races, with the Devons and Herefords most successfully. The Alderneys and Normandys produce an excellent quality of milk, and being crossed with the English stock make good milkers and oxen, which put on fat readily.

5. The white Chillingham Park cattle are supposed to be an original race in England, but this type is found in India and in various parts of Europe, and was the favorite ox of the ancient Romans, even before the days of the Cæsars.

These cattle in England were earliest known to have existed in Lancastershire; and the waste lands in Craven in Yorkshire were formerly ranges for these white cattle, so also the highlands in England, next to the mountains in Wales.

6. The Durhams and the old Short-horns and Yorkshire cattle are said to have been imported into England from the continent at an early day. These cattle have been the stock upon which the improved Durhams or Short-horns have been raised by a cross on the Red Galloways. The Teeswater cattle in Durham and Yorkshire are descendants of this stock. They are all known at this day as *Short-horns*.

Scotch Cattle.

The Scotch cattle are of a mixed race. Many are black and hornless. Some are white, which appear to be the same stock as those of Chillingham Park in England. The mountains of Scotland were originally a nursery of a race of black cattle, of mild aspect, beautiful symmetry, vigorous, hardy, patient of hunger and cold, fattening rapidly, and were closely allied to the ancient Welsh cattle. These cattle are mostly middle-horns, and are called Kyoles. They are also found in the Hebrides and Western Islands. In the Orkney Islands, at the extreme north of Scotland, the same race is found, but stunted by cold and want of food. In Argyle these cattle are, many of them, models of beauty, and seem to have been descendants of the old Caledonia stock, which were in early times a mild race. In Ayreshire in Scotland is found the Ayreshire Cow, an admirable breed of milkers, as well a good stock for the butcher. This is an improved breed, and a cross on the Durham or Holderness, or perhaps the Alderneys.

Irish Cattle.

In the north and middle parts of Ireland the English and Scotch cattle have been extensively introduced. But there is a native stock found all through the southern and western highlands of this country. It is a middle-horned stock, and better known as the Kerry Cow. The animal is generally of small size, active and vigorous, of a variety of colors, some black, red, white, brindle, and mottled colors. The cow yields a fair proportion of excellent milk, according to its size, and fattens quickly. The cows when fed prove excellent milkers. This breed now partakes of many of the traits of the early English cattle, which were small, hardy, healthy, good and spirited for work. It is now looked upon as an inferior breed, as all the original races in England were in the days of the Edwards and Henrys. Many of these cattle have come into Maine.

The *Holderness* cattle are an ancient race which existed from very early times on the western coast of Europe, extending from the Baltic Sea to the confines of France. They were celebrated for the great quantities of milk which they yielded, and some of them had an extraordinary aptitude to fatten. They were introduced into the northern and eastern parts of England at a very early period.

Durham Oxen and Cows.

This race of cattle have been called the Teeswater cattle, from the river Tees in the north of England. The breed were brought into the north and eastern parts of England before we have any historical accounts put on record. The counties of York and Durham in England were the original location of this breed. The old Durhams were said to be slow feeders, but since 1801 the race has been crossed on the Red Galloway or Scotch or polled cattle, and is now called the best stock of England. One of these oxen weighed 3,780 lbs. live weight, and when slaughtered the carcase was supposed to weigh 8,180 lbs.; these are among the largest cattle now in England. The original Durhams were said to have been first crossed on the wild white breed of cattle of Chillingham Park in the

county of Northumberland and in Lancashire; also they were formerly much crossed with the bulls and cows from Holland. At this day the new Durhams are a recent and artificial race of cattle, with very few of the original types remaining. Holderness is in Yorkshire, England, but this section of England was formerly more mixed with Dutch cattle than any other. Great bulls were formerly brought over from Holland and esteemed the criterion of perfection for cattle. These Dutch cattle were used to improve the breed of Short-horns coming down to 1790; this was before the improved Durham cattle made their appearance. The white cattle were known in Jutland, Denmark, Hanover, Olenburgh, and Holland, from the earliest periods. They are of a *Danish stock;* the Danes ravaged the continent of Europe from the Baltic Sea to France for more than a hundred years, from A. D. 850 to A. D. 950. In A. D. 875 they conquered Northumbria in England, which comprised amongst others the countries of Yorkshire, Durham, and Northumberland, and held it for nearly 200 years. Prior to the year 1235 the Short-horn cattle are known to have existed in the north of England. The White cattle and the Short-horns are believed to have come from the continent to England at the same time, and this accounts for the fact that very many of the Durham cattle are almost a *pure white;* and the fancy race of this day is mottled, red, and white in equal portions.

The Yorkshire Cow.

The Yorkshire Cow is a native of Yorkshire, England, and came from the early race of Short-horns. These animals are the best milkers known, and have given (in rare instances) 36 quarts of milk a day; it is by no means uncommon for them to give 30 quarts a day. This cow is a great favorite; she yields more milk in proportion to the quantity of food consumed by her than can be found in any other race. This cow occupies almost exclusively the best dairies in England.

Leicestershire Ox.

This race are long horned, and are one of the earliest races in England—healthy, strong, and hardy.

The Cheshire, Derbyshire, Staffordshire, Oxfordshire, and Wiltshire cattle all wear long horns. They are properly called the "*Long-horned race.*" Westmoreland, Cumberland and Lancashire in the north-west of England was the native land of the *long-horns.* Bakewell, in his time, selected this race to breed from, and he succeeded in an *eminent degree.* Bakewell was born at Dishly, in Leicestershire, in 1725.

The Derbyshire and Cheshire cattle, as well as the Shropshire cattle, were originally *long-horned*, and by being crossed with the original Short-horns, they have made a very fine race of cattle—docile and giving great quantities of milk. The stronghold of the long-horns was in Craven in the West Riding of Yorkshire and Lancashire and Northumberland, but at this day they are not so often seen as formerly. From the Highland counties in the north of England the race was carried south towards Wales, and into the southern counties in England.

Sussex Cattle.

The old Sussex ox is one of the best in England. It has always found a ready sale in the London market for beef. This is a large animal, well formed, with a fine head, neck and horns. When crossed with the Herefords, produce a large, strong ox, vigorous, good and obedient workers. The Sussex cow is principally kept for breeding. The milk is in small quantity, though excellent in quality. She is therefore not a favorite amongst the dairymen. The males of this race are amongst the best for working oxen in England and America, and the females for breeding. The stock are much found also in Kent and Surrey counties. Sussex is a county in the ex-

treme south-east part of England on the English Channel, bounded west by Hampshire county and north by Surrey. The prevailing color is a blood bay. The barrel well formed, capacious, back straight, hips wide and well covered, and the hide mellow. I have noticed many oxen of this type in New-England; in Connecticut and on Connecticut River in Massachusetts. Many of this stock were brought into this country by the New-Haven colony. The original race of Sussex appear to have been much allied to some types of the *Devons*, but they had not so fine horns, nor were they possessed of the agility of the Devons. Many of the feeding grounds in Sussex are *rich* marsh lands, but the Devonshire stock are from mountain districts.

Cheshire Cattle.

These cattle are from the extreme west of England, near Liverpool. These were originally the Long-horned cattle from Northumberland, crossed on the Scotch, Lancashires and other races. The stock has been long known as good milkers—cows had large udders. The belly deep, with prominent milk veins. Some of the cows have been known to yield 24 quarts of milk a day, and 10 quarts a day during the whole season. Cheshire has long been known and renowned as a dairy county in England. There are complaints that the cheese in Cheshire is not what it formerly was. Indeed, American cheese is now sought for and used in the Cheshire hotels. The artificial grasses, cabbage and swedish turnips deteriorate the milk, and we are sure that this kind of food will not compare with the Indian meal for fattening beef. The English beef is spongy, dull flavor, and is far behind the beef made from Indian meal, both in flavor and substance. It is said that the Cheshires cross well on the Short-horns; but it is doubtful whether a total alteration of the old breed is beneficial. Inured as it is to the climate and pasturage of the native hills, modified as it has been by a combination of circumstances in such a manner as to meet the views of the farmer and dairyman.

The Welsh Cattle.

These are said to be from the original native breed of cattle which existed in the country before the *Roman Invasion*. They are represented at this day by what is called the "*Pembroke Cattle*." Great Britain does not produce a more useful animal than the Pembroke cow or ox. It is black. It is one of the ancient stock.

Glamorgan Cattle.

These cattle are from the ancient Welsh cattle. They have a great aptitude to fatten. They are stout and active, strong for husbandry, and seem to be closely allied in their habits to the Devons.

Devon Cattle.

The Devons prevail in the south and south-western counties of England. They are a deep red color, beautiful in the highest degree, in activity for work and aptitude to fatten altogether unequaled. Great numbers of these cattle were shipped by the Pilgrims from Plymouth, Bristol, and other ports in the south of England, to Plymouth, Massachusetts, Boston Harbor, Martha's Vineyard, to Rhode Island, the mouth of Connecticut River, and to Milford, Connecticut, and the mouth of the Housatonic. With the Devons came also the Herefords, which are usually of a darker red than the Devons. There came also to New-England formerly Sussex cattle, as well as the *Norfolk* and *Suffolk* races. They were originally a *middle-horned ox*. Many of the first settlers in New-England brought their cattle from *Surrey* and *Kent* counties, situated south and east of London, and from Southampton; along with these came many of the Alderney cattle. At a later day cattle came into New-England from Coleraine and Belfast in Ireland. The west highland oxen came in along with these, the Gal-

loways and the Ayrshires. At the present time the New-England cattle are a *mixture* of *mixtures*. In 230 years they have become an entire new race, in another country, in another climate, in another field of vegetation—strong, hardy and healthy in a remarkable degree. I never knew one of them to die of catarrh, consumption or gout. The per centage of mortality is less among the New-England cattle than among any other race.

The *Leicestershire* cattle were brought into Massachusetts in 1629 by Francis Higginson, Esq., who brought one hundred and fifteen head of neat cattle. In 1626 a bull and twelve cows were sent from England. These were supposed to come from Wiltshire to Cape Ann. In 1625 the Dutch West India Company imported from Holland into New-York one hundred and three animals, with horses and swine for breeding.

The east end of Long Island, including the county of Suffolk to Hempstead, was first settled by people from Boston in Massachusetts; they brought in the New-England cattle with them. The town of East Hampton was first settled in 1649 by about 30 families from Lynn, Massachusetts. The town of Huntington was settled by a colony from New-Haven in 1646. Smithtown was first settled in 1641; the people first came to Boston, and were originally from Gloucestershire in the south of England. Southampton was settled in 1640 by about 40 families from Lynn, Massachusetts; these people originally came from Southampton in England. *Fishers' Island* and Plum Island were settled with people originally from Hingham, Norfolk county, England. They came in by the way of New-Haven. This colony came from near 100 miles north-east of London, not far from Lynn on the sea coast. The first neat cattle brought into Massachusetts was by Edward Winslow, who came in the ship "Charity" from Plymouth. He brought a bull and three heifers; this was in 1624. Probably these were of the Devon stock.

The people who first settled Salem, which was in the year 1625, came from Dorchester in the county of Dorsetshire, England, which is in the south-west of England. Another colony in 1629 came from Leicestershire in England, bringing with them 115 head of neat cattle, said to be mostly Leicestershire stock. Hence we find in the early settlement of Salem and the adjacent towns races of Devons and Leicestershire cattle. The inhabitants of the town of Rowley are descendants of *Yorkshire colonists*. They came in first from England in 1638, bringing with them the *old Yorkshire* and the old Short-horns, and some of the white Chillingham Park cattle, while the inhabitants of Newbury, Massachusetts, in the same county of Essex, came from the county of Berkshire in England. This is one of the middle counties in England. This settlement was made in 1634. The race of cattle here are the middle-horns. The people in Bristol county, Massachusetts, as well as those in Rhode Island and the Eastern part of Connecticut, many of them came from Bristol, England, and from Wales. Swansea was at one time a great port of embarkation, as well as the whole of the country round the Bristol Channel. The Black Welsh cattle and the Pembrokes, Glanmorgans and the Anglesey ox, and the Devons, seem to have come into Rhode Island, the eastern part of Connecticut, and the southern part of Massachusetts. The Devons, however, were the favorite stock. They soon reached Worcester county and the central part of Massachusetts.

The town of Hingham in Norfolk county, Massachusetts, was first settled by a colony from old Hingham in Norfolk county, England, in 1632. These people brought their cattle with them, which were the middle-horn cattle. Some of the towns in Norfolk county were first settled from Devonshire and

Plymouth. Many families came by the way of the Bristol Channel. Braintree was settled from Devonshire. The great-grandfather of John Adams, President of the United States, came, as he said, from "THE DRAGON PERSECUTION IN DEVONSHIRE," to New-England.

The counties of Suffolk, Norfolk and others on the eastern coast of England, in that day was possessed of a race of cattle known as the "*Suffolk Dun*," a middle-horned cattle. The cow was very much sought for on account of the extraordinary quantity of milk which she yielded. This cow was celebrated for her milk in almost every part of England. Many of this race of cattle were brought into the counties of Middlesex, Norfolk, and Essex in New-England, and were preserved as great milkers by the dairymen.

This stock has spread its progeny very much over the southern part of Massachusetts and New-Hampshire and Maine, but it has been crossed by the *long-horns* and the Yorkshire types.

These cattle in the counties of Norfolk and Suffolk in England have been a good deal crossed out by the Galloways, and are looked upon as furnishing a new stock. The new race are now polled cattle. The colors are red, red and white, brindled and a yellowish cream color. The Suffolk cow is not inferior to any other breed in the quantity of milk that she yields.

The cream colored cattle are also found in Maine. They generally excel both for milk and beef. The yellow cattle are good workers, quick for the plow and cart.

The first white inhabitants of Lynn, Massachusetts, came from *Lincolnshire* and brought cattle with them. Here we find representatives of the old Lincolnshire ox, with a cross of the early Short-horns. The first colony came in 1629; they were farmers; but one of the most prominent men amongst them was Edward Ingalls, who was a tanner. He erected a tannery, and from that day to this Lynn has been noted for its shoe and leather trade. In 1637 another colony came from the town of Lynn in Norfolk county, England. They were also principally farmers, possessed a large stock of horned cattle, which they kept in one herd, and had a man to keep them. These people cut their grass in the meadows and marshes, which proved very serviceable to feed their cattle on. There were more farmers in Lynn, Massachusetts, at that time than in any other of the early settlements. Their grain was Indian corn. One of the historians of that period says, "Let no man make a jest of pumpkins, for with this food the Lord was pleased to feed his people to their good content, till corn and cattle were increased."

At this day the middle-horned cattle mostly prevail in New-England, but there still remain strains of the long-horns, as well as the short-horns. The Anglesey ox is also frequently represented.

In the year 1638 the New-Haven colony was planted. They first came from London after having sojourned at Lyden in Holland. The inhabitants of Milford and Guilford, and other towns in New-Haven county, came out the year following from Kent and Surrey, bringing cattle with them; but very many of the inhabitants of Connecticut came by the way of the *Bristol* Channel, bringing with them the Devon cattle in great numbers, also the Sussex and Herefords; but there are more pure Devons in Connecticut than in any other part of New-England. An early writer says, "that the first planters in New-England were plain men, bred to tillage and keeping cattle; that a great deal of the same spirit has ever remained among these people." There is, says this writer, "A certain niceness and delicacy which still continues amongst their posterity wherein the perfection of husbandry consists." These remarks will apply to the present

inhabitants of New-England with many addititional favorable items. In 1635 the first colony from Plymouth, Massachusetts, came across the country to Windsor, on Connecticut River. They brought a drove of cattle and other domestic animals with them. Before they got over the Connecticut River the winter set in; the cattle lived in the woods and on the meadows without shelter. These fed as well as those which were housed, but many cattle perished during that winter. The Dorchester people who made up a part of the colony lost £200 worth of stock. The next spring came many settlers to Windsor, Hartford, Wethersfield, Farmington, and the towns along the river, from the Plymouth colony, bringing great numbers of cattle with them. The first inhabitants of Dorchester, Massachusetts, came chiefly from Devon, Dorset and Somersetshire in the extreme southern and western part of England, bringing with them their cattle. These were the Devons and Alderneys; but the Devons were the prevailing stock.

In 1636, Messrs. Hooker and Stone started from Cambridge, Massachusetts, with a colony for Connecticut River; the company consisted of 160 persons, men, women and children; they brought with them 160 head of neat cattle—the cattle fed upon the buds, leaves, and grass found on the way, the people subsisted on the milk of their cows. This colony came to Hartford—they passed over mountains, through swamps, thickets and rivers, they slept on the ground, with nothing to cover them by night but the heavens, and passed through trackless forests, overhung with high and thick branches and green leaves, with grape vines which canopied the whole, extending from tree to tree, *fragrant with flowers*. Mrs. Hooker was sick, and was borne through the wilderness upon a sedan chair, made by fastening two poles on the outside of two horses, one horse being placed ahead of the other with a chair between the two; the horses were each guided by two men, and a boy on the back of each animal. They all came safe; but the planters in Connecticut had but few working oxen or instruments adapted to husbandry when they first landed in the wilderness. The deep red color was a favorite in early times for cattle, and they were very much brought to New-England. The Herefords formed a very fine breed for fattening. Many of them were a deep red, with not a white spot on them—the cows were said to have been excellent milkers, some of them yielding 17 lbs. of butter a week. The Devons were better adapted to this country than most of the other races—they were full of activity, healthy, full of spirit and courage, broad foreheads, clean limbs, with a pleasing vivacity of countenance, full of agility, sure footed, capable of traveling at a high speed, with a disposition to fatten unequaled by most other races. Coming from a mountain country in England and Wales, the breed suited the soil and climate of New-England; they readily acclimated. These cattle are quick and honest at work, docile, and not inferior milkers. The race of pure red cattle, however, seemed to prevail more in Connecticut than in any other of the New-England States. The middle part of Connecticut is now distinguished for a fine breed of improved Devons. Such a great variety of races being introduced into the country at its early settlement, many of the original stocks have been crossed out, forming an entire new race, superior to the animals of any other country. I have seen the Leicester and the Irish lopped horns—the Galloway ox with its progeny, mixed with cattle from Suffolk and Norfolk counties, England—the Shropshire, the Derbyshires and many others of the long-horned race. These occasionally show strains with an enormous growth of horns. The Yorkshire cattle in New-England have undoubtedly been the stock from which the best milkers

are obtained. I have seen a small herd of cattle, mostly red with a small band of white around the middle. My brother, now living in Hampshire county, Massachusetts, is working almost the best pair of cattle I ever saw; they are a white, with every mark of having descended from a cross on the Chillingham Park Cattle; black noses and black inside of the ears. Many of these crosses of color are found in Maine, and north New-England, and put on an orange or cream color.

After the Battle of Bunkerhill, in 1775, seventy-five patriots at Farmington, Connecticut, started for Boston, 110 miles distant. They took an ox team and cart loaded with salt provisions, peas, bread, camp utensils, with a puncheon of rum to cheer on the soldiers and to wash their sore feet. They came to Roxbury in nine to ten days—the oxen stood travel better than the men.

In 1778, the inhabitants of Durham, in Connecticut, sent to General Washington, at Valley Forge, two oxen, driven almost 500 miles through the country, greatly exhausted of its forage. These cattle furnished a dinner for the officers and soldiers of the American army. One of them, a steer, five years old, weighed when slaughtered 2,270 lbs.

The Welsh cattle seem to have been very much crossed out in New-England. The Reverend Mr. Buckley, of the town of Colchester, Connecticut, presided over the church of that town from 1703 to 1731. A church in a neighboring town was much afflicted by dissensions; they applied to Parson Buckley for advice; he wrote them an affectionate letter, told them to heal all their dissensions, and live in peace; but while the parson was writing the letter to the church he found he had to write one also to his tenant, who occupied one of his farms in another part of the town. He sealed his letters, and in superscribing them, the one for the church was directed to the tenant, and the one for the tenant to the church. The afflicted church convened to hear the letter from Parson Buckley read, which was to heal all their difficulties. In due form the Moderator broke open the letter in the presence of his assembled brethren, and read as follows:

"You will see to the repair of the fences, that they be built high and strong, and you will take special care of the *old black bull*."

This letter was deemed mystical. One of the elder brethren got up and said, this is just the advice we need. The *old black bull* is the Devil, and we must watch him thoroughly. The fences must be built high and strong to keep out all strange cattle off our fold. Go home said the elder, obey your Divine Master. The meeting was forthwith adjourned, the people departed, the animosities subsided, harmony was restored to the afflicted church.

We are of the opinion that the *old black bull*, was one of the black native stock of Wales. Indeed a person traveling through New-England will see individual cattle which strongly represents every type found in England or along the western coast of Europe.

Some of the people called the *Puritans* originated in the north of England and the south-east part of Scotland. In the year 1607, some of them were driven from the north of England—they first settled in Amsterdam; two years afterwards they went to Lyden, where the colony increased with numbers from London and the South of England, and remained until 1640. In 1621, the first colony came to Plymouth, Massachusetts; these were a portion of the Lyden congregation, and other portions of the congregation afterwards came to Massachusetts; finally the last portion of them came to New-Haven in 1637 to 1640. On the 3d of November, 1620, King James signed a patent incorporating the Duke of Lennox, Sir Ferdinand Gorges, and thirty-eight others, styling them the "*Council established at Plymouth, in*

the County of Devon, in England, for planting, ruling, ordering and governing of New-England, in America." This company granted New-Hampshire to Captain John Mason, and the Province of Maine to Gorges. The first permanent settlements in Maine were begun in the year 1607, in the extreme southwestern part of the State, next to New-Hampshire. The colony of Maine, was originally a grant from the Plymouth Council in Devonshire, England. The colony remained under the Plymouth Company till 1677, when it was sold to the Massachusetts colony, and remained under Massachusetts government till 1820.

In 1622, Mason went to New-Hampshire, and a son of Gorges to Maine, as governor. Mason established himself at Portsmouth, and Gorges made settlements at various places along the coast, to Machias. Governor Mason imported a large breed of cattle from Denmark, and when he died some of his stock were carried to Penobscot, and some to Nova Scotia. In 1658 Francis Norton drove 100 oxen, a part of Mason's herd, from New-Hampshire to Boston, and sold them for 125 dollars per head. This was the current price for the best cattle in New-England at that time. New-Hampshire remained, with but few intervals, under the jurisdiction of Massachusetts till 1749, more than 100 years, when the two colonies were separated. Gorges had been an officer in the British navy, under Queen Elizabeth, and James, in 1604, appointed him Governor of the island of Plymouth, in England. Mason had been a merchant in London, but became a sea officer. The first people to settle in New-Hampshire came from London, Bristol, Exeter, Plymouth, Shrewsbury and Gloucester, and was called the Company of Laconia in England.

In 1623 Daniel, Thompson, a Scotchman, and Edmond and William Horton, fishmongers in London, came over with a colony furnished with all the necessaries to carry on their design in forming settlements in the country. Some of the earliest settlers were of good estates; some of great account in religion.

In 1638 a company came from Norfolk, England, and settled Hampton, New-Hampshire. The Norfolk and Suffolk dun cattle were brought into New-Hampshire and Maine at an early date of their history.

Mount Desert Island, in the county of Hancock, State of Maine, as well as many other islands about the mouth of the Penobscot river and on the coast, were formerly much settled with French colonists, who came from St. Malais and other parts on the north of France, bringing with them the French cattle. Many fishing vessels came from Marseilles in the Mediterranean Sea. The race of Huguenots afterwards came into Maine in great numbers. It is said that Talleyrand, the great French minister under Bonaparte, was born of a Quaker mother on the Penobscot river. The cattle of northern and western France were originally well represented in many parts of Maine, as well as the western Highland cattle of Scotland. The fishermen of the west coasts of Ireland and Scotland were for a long time engaged in the fish trade of Maine. The New-Hampshire and Maine colonies started with the best of stocks of cattle from Norfolk, Leicestershire and Devonshire, England, and afterwards obtained herds from the Massachusetts colony, which first started at Salem, with cattle from Norfolk, Leicestershire, and Yorkshire, and other parts of England. The Puritans were well acquainted with the value of the shorthorns; and the Yorkshire and the old Norfolk dun cattle, were all great milkers.

Large numbers of these cattle have been at various times brought into New-England. The Yorkshire and the Norfolk and Devon types are found scattered over the best dairy districts in north

New-England, and our best milkers retain many of the Norfolk and Yorkshire forms of the original animals. These have been crossed with the Devonshire stock. A large portion of the cattle in Maine are descendants of the Yorkshire, Leicestershire, Norfolk, and Devonshire races.

The working oxen in Maine are mostly red, with a strong cross of the Devons, and Yorkshires, and Leicestershire, and Scotch cattle. The *lumbering business* has trained up a race of oxen, possessing all and more than the original agility and fleetness and intelligence of the Devons; while the carcase has been improved to a great size and strength, both for work and for beef. The whole race of mountain cattle in New-England, is vastly superior to the original stocks of the old world. There are no dairy regions so good as those on the highlands of New-England and the State of New-York, where the pastures are full of red and white clover.

The Galloway cattle are now a horn-less race, but formerly were a middle-horned animal. They have lost their horns by debility or deterioration. New pastures—the buds and flowers of the grasses, shrubs and trees—yield the phosphate of lime and ammonia abundantly, which are necessary to form the bones and horns of cattle, and to give them a large, healthy and strong carcase. Old pastures and feeding grounds soon become exhausted of ammonia and phosphate of lime; hence the horns of cattle pastured on such soils become small and feeble; the horns fall off or do not show themselves; the animal loses its health and hardiness, and does not make a large, strong and healthy race. This is the case with the Galloways and polled cattle in England. These cattle can never equal the long-horned races for beef, milk, or work, and are not much grown or cultivated in New-England.

The long-horns of Cumberland, Wiltshire, Lancashire, were originally brought into New-England, and from these strains the long-horn cattle show themselves. These cattle being crossed on the north of England cattle, generally produce the "*middle-horns*," which prevail in north New-England.

In passing through New-England, a person can not but observe fine specimens of every type of cattle known in the west of Europe, and occasionally he will see oxen with horns of enormous length.

The domestic ox, as well as the original wild ox, are naturally a mountain animal—they seek highlands; they like the clear, cool air and pure spring water. When turned into a pasture to graze they go to the top of the hills, and at night select a little valley sheltered from the winds to herd themselves. The best butter, milk and cheese, and the sweetest beef come from the mountain ranges. There are no cattle that a man can own to so good advantage as the New-England mountain cattle. A feeder can make more beef out of them according to his outlay, than from the best foreign stocks. When we import cattle we throw away our money, except when we import bulls into the country to cross on our native cow. The cattle from the old world have not constitutions adapted to our climate. Our native cattle have been acclimated for two hundred and twenty years. The cattle of Europe lose caste by importation; they can not stand the extreme climate of winter and summer.

In the winter of 1799 the cold in New-England was excessive. During the preceding summer, from the 28th July to the 1st September the heat was intense, the mercury was from 86° to 93°; vegetation failed, drought was excessive, many trees shed their leaves in August, and many cattle perished in the cold winter following for want of food.

The town of Goshen, in Litchfield county, Connecticut, is on the most ele-

vated land in the State. This and the adjacent towns is one of the best tracts for the dairying business. Cheese and butter are made here in large quantities, the fame of which is widely and justly celebrated. We are all familiar with the butter and cheese brought from Jefferson, St. Lawrence, Herkimer, Delaware, Sullivan, Orange, and other mountainous counties in the State of New-York. This butter and cheese is equal to any in the world, but no better than that made in New-England.

The cattle in New-England are well housed, especially in the winter. They are more docile than the original herds from Europe, healthy, hardy, and many of them are of a very large size, full of agility, and put on fat very fast when at the summer pastures or fed in the stalls. Many of the cows are excellent milkers; some of the best progeny of the Yorkshires yielding in many instances from from twenty to thirty-four quarts a day. The New-England oxen are great travelers on the road. Wherever the New-England people have emigrated to, they take their cattle with them. The cattle which make up the trains for California are mostly descendants of the New-England stock. Their ability to travel and endure privations render them almost invaluable. The largest cattle in England weigh no more than 3,180 lbs. per carcase; while some of the largest carcases of the New-England cattle have weighed from 3,500 to 3,600 lbs. after being slaughtered. Indeed, there are no better cattle for milking, fattening and work. The grazier, the feeder, and the butcher and dairy-man can find no better stock. The health of the New-England cattle is exceedingly good; their horns and bones are strong, the horns set strong and well on the head. The true blooded Devons, Sussexes and Herefords are better preserved in the State of Connecticut than any other part of New-England, indicating that these were the original favorites.

If our people bestowed half of the pains in breeding our native cattle, that the English do, we would have a far superior race to any in the old world. The following are some of the qualities of the New-England cattle.

First.—They are very hardy, free from disease and epidemics of every kind in a remarkable degree; with less mortality than occurs to stock in the old world.

Second.—The cows are more prolific in healthy progeny than any other class of cattle known.

Third.—The geldings and bulls when put under the yoke will perform more labor by the day, and continue labor for a greater length of time, and keep in better condition, than any other stock of cattle.

Fourth.—These cattle have more agility, more strength, more size, and will work better with the plow, harrow, or cart, than any other race of cattle of their cost and expense of keeping.

Fifth.—The bulls and geldings travel well with large loads. The geldings are strong, patient, steady, and honest to a remarkable degree. It seldom requires more than the plowman to drive and govern his team.

Sixth.—When fed they put on fat speedily. Their beef is of the sweetest and healthiest kind, juicy and marbled, and flavored better than any found abroad.

Seventh.—The cows are the best of milkers, acclimated for 220 years, and the breed have been thoroughly crossed. The breed now is found suitable both to the soil and the climate—qualities demanded by all stock growers.

Eighth.—A breeder can make more money by the native stock to breed upon, according to the expense or capital, than from any other known race. They are profitable alike to the graziers, the breeders, and the butchers.

Ninth.—The flesh and beef, when killed, is of the best flavor, easily cured for

barreling, and can be preserved with little care and skill, without much expense. These cattle are good and healthy feeders, and there is a greater yield of milk and butter from them than from any we have seen of the foreign cattle.

Tenth.—The quantity of milk which cows give when running on pastures during the spring and summer, must vary to a considerable degree, according to the feed and milking qualities of each animal. Fair cows, fed on a new pasture, and a small supply of Indian meal, will produce from 10 to 24 quarts of milk per day. Many of the New-England cows put on the lineal Yorkshire type, with large udders, fine teats, clean head, shortish necks, deep chests, large carcases, straight backs, full thighs, strong legs, yielding from 20 to 30 quarts of milk per day. The best milker in England is said to have given 36 quarts per day, yielding 372 lbs. of butter in 32 weeks, averaging 20 quarts per day for 20 weeks. Some of the cows from the mountains in New-York and New-England, have done equal to this. But then a cow must be in thorough health, full grown, of a large size, fed on a new pasture, and with Indian meal, to enable her to come up to this point.

Until within the last 300 years, the cattle in England were small, generally not well fed or housed in winter, furnishing but little good and fat beef. When the stock was transferred to New-England it improved wonderfully in size and quality.

The fresh, clover pastures, fine hay, grown on the newly cleared lands, the Indian meal, all made a feeding to which the cattle in the old world were strangers. The hills and mountains in New-England yield the richest pastures of any in the world, while the thousands of valleys along the rivers and streams yield hay and Indian corn unequaled in quantity and excellence of kind. It is on this keeping the New-England cattle are fed and fattened, and it is this keeping and feeding which has given them their superior characters for beef and milk, unequaled by anything of the kind found in the old world.

The cold, damp climate of England and Scotland is not so favorable to stock as the pure, dryer air, clear skies, and summer vegetation of the New World. The snow in New-England commences to fall the first of December, and continues to the 20th March, generally. It is dry and mealy, the climate is cool, dry and bracing, seldom damp and chilly. The mountains and hills furnish pastures for cattle, such as are unknown to the Old World.

Cattle bred here grow to the largest size, their lungs and chest become expanded, their bones and muscles strong, the barrel of the carcase large, full and round. The geldings have borne the yoke in their youth, and have experienced the good effects of it. Hence the working oxen are stronger, larger and better than any other, and make the best of beef when fattened.

The States of Maine, New-Hampshire, and Vermont have as fine animals as any other. Their stock originally came in from Plymouth, Bristol, Norfolk, Cumberland, Yorkshire, Denmark and Scotland, and from New-England.

Many of the French cattle, the Scotch cattle, the English cattle, and the Irish cattle have been introduced into Maine.

The Massachusetts colony began at Salem in 1621, and continued till 1692. They brought along with them the "Yorkshire," the early "Short-horns," the "Lincolnshires," the "Norfolks," the "Suffolk Duns," the "Leicestershires," the "Devons," and the "Welsh Cattle."

Many settlements were made in New-Hampshire and Maine, from the Massachusetts colony and the towns on the Merrimack river.

The first grant of a patent of Maine extended from latitude 40° to 48° clear to the bay of Chaleur in Canada, and

from the Atlantic to the Pacific ocean. The grantees subsequently united merchants with them from London, Bristol, Exeter, Plymouth, Shrewsbury, and Dorchester, England.

A great many ships came out to Maine in the spring, year after year, bringing from various ports in France, England, Scotland and Ireland, more or less emigrants and cattle, and taking back a cargo of fish in the fall and winter. These ships would introduce cattle from almost every seaport in the realm. Thus we find the cattle of New-Hampshire and Maine a more thoroughly mixed race than those of any other part of New-England. They are the best of oxen for heavy work, and when fed well, for beef.

BREEDING CATTLE.

In order to do this with success, the parents should be full-grown, selected of a good size, from 4 to 10 years of age, living in a healthy country. A hilly country is much the best; neither the bull nor the cow should be stabled, nor be ringed. Both bull and cow should run at large, the bulls be accustomed to the yoke while they are calves, and kept fairly and moderately to work under the yoke in the open air, fed on fresh grass, hay, Indian meal, with boiled turnips, potatoes or carrots—stabled only during the winter. These bulls make the best working teams; strong, full of enterprise and courage—will plow deep furrows, draw heavy logs, cart good loads, make heavy stone wall. Indeed a breeding bull ought to be a working bull, and then they never have the catarrh, consumption or gout to afflict them, or to render their progeny feeble or sickly. The calves should come in the month of February and on to May. They should take the whole milk of the mother the first 6 to 12 months, constantly handled to keep them docile. They will gradually wean themselves when their teeth and stomach become adapted to other food. After the first 3 months a calf ought to run in the pasture. When they begin to wean they should be fed with fine hay, fresh grass, and a small quantity of Indian meal. In the winter the cow is frequently injured by drinking cold water. It produces constipation of the bowels, and cholic. Two pailsful of warm water, with a half peck of rye or wheat bran during the day will keep the bowels free and open. I have known cows dried up by drinking cold water immediately after calving, with violent symptoms of inflammatory fever. In the winter season the cow had better drink warm water from the temperature of 55° to 64°, kept in clean, warm, and well-ventilated stables. The calf needs a warm stable, with straw or chaff to lie on. The food must be upland hay. Cattle never do well on wet, swampy land, nor will they feed to advantage on hay grown in marshes, nor put on flesh when they lie down in damp, cold places. Nor can cattle be fattened in the winter in the northern climates, without warm and dry stables, and a full supply of food of the best kind.

The cow should never be milked or suckled during gestation. All the milk drawn from the cow at this period of time is furnished at the expense of the growing fœtus. Hence the calves of the great milkers are generally feeble, poor and bad milkers. The first-born calves are the best. Primogeniture in raising stock is a law that *works well.*

The farmers of New-England have much neglected the breeding of stock. They do not seem to realize that they have the best stock in the world to improve on. It took all the best people out of the four kingdoms of the mother country to produce the institutions of New England. The cattle came along with the first settlers, and the cattle were the best that the old world afforded. The number of milch cows in Maine by the last census were 133,556; working oxen, 83,893; other cattle, 125,890. While the butter made yearly is 9,243,811 lbs.; cheese, 2,434,454 lbs. The town of

Bangor on the Penobscot river sawed and exported in 1850, 200,000,000 feet of lumber. Vermont had by the same census, cows, 146,128; oxen, 58,577; other cattle, 154,143; Massachusetts, milch cows, 130,099; oxen, 46,611; other cattle, 83,284; Connecticut, cows, 97,277; oxen, 59,027; other cattle, 114,606.

Foreign cattle are not suited to the New-England climate, and when introduced lose caste. When brought into the country they are much like foreign trees and grape vines.

ALANSON NASH,
36 Beekman St.

For the American Farmers' Magazine.

SOME OF THE EVILS OF A SUPERABUNDANCE OF LAND.

MR. EDITOR:—Among the many useful topics introduced into your magazine to interest and employ the thoughts of your readers, will it not be seasonable and to the purpose that some should have their attention called, for a moment, to an inquiry into the economy of duly proportioning the extent of farms to the ability of their occupants to put them to the best possible use? Are there none within the reach of your journal who are infected, to some extent, with that insane appetite which has inflicted ruin on many, and has been the bane of multitudes, of multiplying the number of their acres beyond the capacity or means they have for rendering them valuable?

Has not the proper time at length arrived for reminding such, they being actual incumbents of the soil, that the land justly belongs to those only who can appreciate the obligation they are under, to use what has fallen to them and come under their supervision, so as to carry forward and ultimately accomplish the design of the Creator in the bestowment of such an inheritance? It is not sufficient that there is enough for all, unless each one, in the general partition, can be allowed to take and enjoy his rightful share. It was never intended by the great Father of the human family, in making provision for them out of his ample domain, to countenance invidious distinctions by allowing some to engross that they may waste what others need, so that the supply should not be equable and impartial. Though the abundance be ever so unlimited and overflowing, yet this is no valid plea in extenuation of prodigality in any quarter. When a miracle had fed thousands from a few small loaves and a residue had been left after they had eaten to their fill, yet the fragments were not to be thrown away. So the ground we inclose for ourselves, to have it under our own eye and subject to our own particular and exclusive management, should be made to produce all for which it is available, or which our best industry and skill can elaborate from it. When it is otherwise, do not manifest evils and egregious wrongs show themselves as the effect of miscalculation or misarrangement in the conduct of affairs?

Let us look into this matter a little, and inquire if something can not be done to put things in a better condition, that we may realize more from the exertions and expenditures we employ, and that others, the community to which we belong, may reap benefit from the better course we are induced to take.

Modern experiments in agriculture have abundantly demonstrated the good effects of labor judiciously bestowed on small parcels of ground in the production of returns vastly beyond what has been usual, in times past, under other systems of cultivation, requiring large tracts for the attainment of small crops. Now, what does this prove, but that more land has heretofore, and is still, put under tillage than is necessary for a given amount of produce, and that a little land made fertile by the skilful hand of tillage, is of more value than a much larger quantity put to use with inferior results? Are there not then evils to be

deplored which must inevitably attend the practice of making farms consist of more land than can be worked, so as to insure proceeds in some approximation at least, to the susceptibilities which nature has given them?

One obvious evil is, that a great amount of time and labor, together with other domestic comforts and enjoyments, is wasted, thrown to the winds, and accounted as nothing. And who is disposed so to undervalue life, vigor, ease, leisure, abstinence from perplexing care, and the satisfaction of finding that his energies are wisely applied, as to double his expenses in all these things by assigning himself a large area for his operations when a much smaller would better answer his end?

Another evil, not unworthy of consideration, attendant on the division of a neighborhood into few farms to make them large, is that the population is necessarily sparse beyond what is desirable for convenience and comfort. Public expenses by this circumstance become burdensome. Where the people are few, taxes for the support of necessary public institutions, if such appendages to a prosperous and happy community are enjoyed, must be high, though the payers of them may be straitened in their means proportionably to their nominal wealth, predicated on the number of rods covered by their claims. If, by cutting down farms to a moderate size, a people, few in number, separated from each other by inconvenient distances, could be doubled or trebled in number, and be brought into compactness as near neighbors, who could fail of seeing that such an arrangement must greatly contribute to the prosperity and comfort of those who should become partakers of its fruits?

Another evil which should not be quite overlooked and disregarded, results from the fact, that one man's having too much land occasions another's having too little. Is it not an obvious defect in society as it exists at the present time in our country, and more so perhaps in others, that in assigning places to all that none should be deprived of opportunity to exercise the talent they have for active usefulness, too few are retained on the soil to act the part of husbandmen, while the larger portion fly to unproductive employments, or to such callings as leave them dependent on others for their daily bread? It is not pretended, however, that though the earth was given to be the grand storehouse from which supplies of material good are to be drawn for the subsistence of all, that therefore all should be limited to following the plow, or to obtaining a livelihood by some other laborious means of extracting from the earth its nutritive virtues. Man is not to live by bread alone. But as this is at least one of the indispensables in what goes to nourish and sustain human life, enough of human thought and energy should be always at hand and in actual service to produce a sufficiency for all. But to what result is the known tendency of the popular taste, in these days, as respects the matter of obtaining food to eat and raiment to put on? Do men, as they grow up to see the need of doing something to obtain what is needful to the body, covet a spot of earth on which they may pitch their tent and ply the implements of agriculture, until they have learned by their own experience what is meant by eating one's bread in the sweat of his face? Is it not more common to see other expedients looked to and seized upon as promising pleasanter if not more remunerative methods of laying up treasure on earth and basking in the sunshine of worldly good? And what is the effect of this antipathy to plowing, sowing, and reaping, and the various rural labors which fill up the hours and exhaust the powers of the man who lives on the fruits of his own toils? To what causes, in like manner, may it be attributed?

Among the many influences which go to produce and nourish anti-farming propensities, and to swell the ranks of merchants, and mechanics, and the indolent tribes, not the least, in my opinion, is the scarcity of land, made so in particular localities by the greediness of proprietors in holding possession of all they can grasp, though of scarcely any worth to themselves in real profits. Could it be parceled out in such minor portions as would require an increase of labor, and would insure a still greater increase of profit, many landless traders and artisans would find themselves accommodated, if not with large freeholds, yet with snug auxiliaries and helps to a living. The evils to them of not having been thus favored many have unquestionably suffered in the embarrassment and privations which for months past have lain with oppressive weight, on those especially who have not been protected by their relation to the earth as its cultivators. Oh! how blest the farmer in those days of destitution and suffering, who can open the door of his storehouse and there be met with the sweet smiles of plenty.

It is not in the heart of the writer of the above to dictate to any one, nor even to sketch a plan or give advice for the disposal of lands to enhance their value. His only object has been to offer hints and suggestions, and leave it to the discreet and prudent to consider and act as their own judgment shall prescribe.

CHARLEMONT, Jan., 1858. J. F.

AGRICULTURE, HORTICULTURE, ETC., ETC.

BY A PENNSYLVANIAN.

I HAVE received the first number of the *American Farmers' Magazine*, and am much pleased with its form, *appearance* and *contents*. I think it is worthy of the patronage of every farmer and mechanic; and the minister, doctor and lawyer would not be harmed by a careful perusal of it monthly. I would most heartily recommend it to all.

But little grain was sowed in this part of Pennsylvania last fall; and owing to the dull prospects of the market and the scarcity of money, but little, comparatively, is doing in the *lumber* line this winter. The price of property has fallen very much. It is almost impossible to raise money on any terms. There is great retrenching in *family* expenses. The people, one and all, rich and poor, have been living too lavishly, in eating and drinking, and wearing, to live long, and be healthy, happy and prosperous.

Mankind seem to have lost sight of, or never to have had, a very fair or correct view of the end and object of human existence. It is true that a man, that anybody, that everybody should eat to live, and live to enjoy life, to be healthy, cheerful and happy, and to ripen for immortality hereafter.

Man should study the laws of his whole being. He should seek to grow healthy, wealthy, and wise as he grows older. Man, begotten in the image of his Divine Parent, should be ashamed, should consider it a *sin* to be *sick*. He has no business to be *sick;* and if he gets sick, he should anxiously seek for and remove the cause. The child should die, if at all, an hundred years old. Every one is the father of his own sickness. The man, or woman, or child that lives soberly, temperately, wisely, and righteously, will seldom be *sick*, if ever. Every one should strive to be wealthy, not only in money, but in that wealth which consists of a healthy, noble and divine humanity. There is no sin in money wealth, if it is obtained in a wise, honest and honorable way, and for a wise and honorable use, and not by fraud, deceit, and robbery one of another, but by honest labor, by cultivating the earth, and developing its resources, so that while the individual is adding to his own material wealth, he is at the same time adding to the wealth of all mankind.

Every one should strive to grow wiser as he grows older, by sipping the honey of truth from all the flowers of true knowledge in the domains of nature and revelation. I would like to see more, far more attention paid to the improvement, elevation, refinement, and perfection of humanity. The whole nature of man needs to be developed. It must grow up and bring forth fruit in abundance.

God speed the course of agriculture, and every kind of culture calculated to develop and improve the world and all its inhabitants.

I made a trial of the new Chinese sugar cane the past season. The season was a very poor one for the purpose. The spring was too late, and the autumn frosts too early for it to mature. I made about twelve gallons of very good molasses. It took about ten gallons of juice to make one of molasses. I had no seed get ripe.

We crushed the juice out with a pair of wooden rollers of my own construction, worked by a horse. I intend to try it again next season if all goes well. It will do well in a dry, hot summer; will mature its seed and make sugar.

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We think our correspondent speaks rather too strongly of the *sin* of being sick; but we suppose he means, that if we would all live according to the dictates of reason and an enlightened understanding, and not be governed so much by passion and appetite, there would be less sickness and longer life, which is certainly true.—Ed.

SORGHO SUCRE, OR CHINESE SUGAR CANE.

BY A MASSACHUSETTS FARMER.

Expectation has been so highly awakened by the proclamations made of the benefits to accrue from the culture of this plant, that I determined to ascertain, if possible, whether or not it was worth cultivating. Accordingly, I looked at it, wherever I found it growing, and have inquired of those who planted it, and the result of their culture, where it matured at all, was plants growing from 10 to 15 feet in height, and from 1 to 1¼ inches in diameter.

As a forage plant, it is generally said to be less acceptable to animals than the stocks of good sweet corn, though cattle will eat it. I doubt exceedingly whether it is worth growing for this purpose, where Indian corn can be grown. Perhaps it will grow on a soil of poorer quality than corn, though I never have heard that it was prejudiced in its growth, by the application of good fertilizers.

Many of my neighbors grew small patches of it, say from one to ten square rods, and when it matured they cut it up, and have it now, waiting to learn whether any use can be made of it.

Some have undertaken to press the juice from the stocks after the leaves were peeled off, and in this way they have obtained from one to two gallons of tolerable syrup from a rod of land; but nobody thus far has realized any convenient benefits from its culture. To be sure it was *a new thing;* they had to learn how to grow it, and how to use it after it was grown. Some have produced seed that they think will come up another year; but no one that I have met has produced any *sugar*, and very few are yet satisfied that the plant is worth growing at all. It is said the season was so wet that it was not favorable for its growth, and that one trial is not a sufficient test of its value. I have not heard of any sugar obtained from it this side of Philadelphia; and from the experiments there as detailed in the *Tribune*, I doubt whether the sorghum is worth cultivating. I have seen beautiful specimens of loaf and other sugars made by the gentleman from Philadelphia; but it should be remembered that he is a *sugar refiner* by occupation and long experience, with all the conve-

niences at hand for the operation of *making of sugar*. I do not think, therefore, that what he has done begins to prove the expediency of the farmers at the north, embarking to any considerable extent, in the culture of the *sorghum*, or even of the imphee—a rival plant introduced by another gentleman, who professes to have discovered it in the interior of Africa. I am quite willing the African plants and African subjects should remain at home. We of America have enough on our own soil to engage our attention; and if we mind our own business we shall be better off than to be constantly hunting after "some new thing."

With many thanks for your polite attention, and an earnest solicitude for the prosperity of the cause you so ably advocate, I am, now as ever, faithfully yours.

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We fear our friend from Massachusetts, in his well known opposition to all sorts of fanaticism, is getting over cautious about new things. New things are not necessarily good things. We agree with him that Indian corn is an excellent forage plant, and that we have long doubted whether anything better would ever be found for our climate. When Hiawatha obtained the corn plant from the Great Spirit, rather when God gave it to mankind, it was a magnificent gift. Still there are other valuable plants, and we see not why the sorghum should not be thoroughly tried. If those who are adepts in sugar making have succeeded in making large quantities of sugar, and that of a very superior quality from the sorghum, as we have occasion to know that they have, that should be set down in its favor; and the fact that others have failed through ignorance of the process, or from the want of proper fixtures—causes that certainly are removable—that should not be put down against it, but charged to the true cause, one that will not necessarily be lasting. We would not advise any one to give up the staple crops of the country for the sorghum, but rather to hope for a better season and try again, but on such a scale as would not be ruinous in case of failure.

ON THE INTRODUCTION OF NEW VEGETABLE CROPS INTO THE UNITED STATES.

BY A FRIEND.

The importance of the introduction of new crops into a country possessing within its limits so varied a climate as the United States, is too self-evident to require arguments in its support. Much credit is due to the efforts that have been made by the Patent Office in this direction during the last three or four years; and we have reason to believe that it is to the personal exertions and intelligence of Mr. D. S. Browne since his connection with the department, that we are, in great measure indebted for the attention that has been paid to this subject.

The difficulties that surround its successful prosecution are much greater than would strike the casual observer; and it is of course that many well directed experiments have to give place to renewed efforts before success can be attained by the introduction of even one *really* valuable new family or variety of plant.

It is too early yet to speak positively, but the *sorghum* certainly bids fair to be one of the most valuable acquisitions that have been made for some years, notwithstanding the diversity of opinions relative to it that were prevalent not long ago.

We do not, however, propose, in the present article, to review the character of recent introductions, but to throw out some suggestions upon the most probable mode by which the search for new plants may be advanced.

The subject is one that all those who have relations or friends traveling or resident in other continents should direct

their attention to; for by the simple collection and transmission of seeds, much may be done. It is desirable, however, that the subject should be prosecuted in a more systematic method, and governed by scientific principles, as to the direction in which the search for novelties is made.

The constitution of plants is, beyond certain limits, fixed and unalterable. Different families of plants, as we know, vary greatly in their powers of endurance of drouth and moisture, heat and cold, light and darkness. Most families will submit to considerable variation in each of these respects, when transferred from their native habitat to other climates. But *what* the amount of that variation will be can, in each case, be only known by experiment.

Much has been said and written upon what has been called "acclimating plants." It is too lengthened a discussion to enter upon at present; but the remark may be made, *en passant*, that there is no doubt that many an assured fact of "acclimating" has had no foundation beyond the discovery, from experiment year after year, of the amount of cold or heat that the particular plant could bear without destruction to its vital power, in the locality to which it has been introduced.

But, the constitution of plants being fixed, it follows that we may reasonably expect those plants to succeed in this country that are found, indigenous, in climates the most similar to it.

In considering again the question of *climate*, it may be remarked that too much regard is frequently paid to the question of latitude taken alone; and too little to two other considerations that should always be taken into account in connection with latitude, as indicative of climate, namely: the elevation of the locality above the level of the sea; and its vicinity to, or distance from, the ocean or any large inland lakes. To any one who is familiar with the climates of the several Middle and Northern States, this, on reflection, will be evident; and a reference of a map of this continent that is marked with isothermal lines, will demonstrate it at a glance.

It is from the circumstances referred to in the preceding paragraph, that the Himalaya Mountains have been so prolific of horticultural riches to Europe.

There is another circumstance connected with climate as affecting vegetable life that also deserves the attention of the plant collector. It is found that the eastern sides of different continents are much better adapted to the development of the flora of either than are the western; and *vice versa*. For this reason it is highly probable that China will one day be found to possess many plants that will thrive luxuriantly in these States that will not succeed in Europe. Nor does this apply to the Southern States alone. For there is in the northern and southern districts of China a greatly varying climate; and, although not to the same extent as in the northern parts of this continent, yet the difference of summer temperature in the north of China, as compared with its winter, bears a much nearer relation to the same changes in this country at the same season, than to those in Europe. Consequently it is not at all unlikely that many of the plants of Northern China that may not submit to the vicissitudes of winter in many of the more western parts of Europe, may yet find themselves quite at home here in the Northern States.

China, therefore, presents a promising field to the enthusiastic botanist and vegetable physiologist. And we hope that our neighbors who have friends in the celestial dominions, will call their attention to this interesting subject.

It can not be expected of course, that those who have not paid attention to matters connected with agriculture or horticulture, should have that degree of accurate information which would be

requisite to enable them in a foreign country to make those discriminations necessary for the researches of the botanist. It may, therefore, be at first sight supposed that it is a difficult, if not impossible matter, for the traveler for business or pleasure successfully to take up. But this is not so. For whoever he may be, he carries with him at least the recollection of the vegetable productions of his own country, by which he has himself at home been surrounded. He knows the fruits he ate, and the kind of cereal from which his bread was made. When, therefore, he finds in China, or elsewhere, fruits and vegetables for food, or used in commerce or the arts, with which he is unacquainted, it is highly probable that they are not yet introduced to his own country. He can, therefore, at all events, make inquiries about them, and if practicable, (which often if not always it will be,) he can procure seeds or plants for transportation to his friends at home.

With regard to the transportation of seeds from distant parts of the world, it is now well ascertained that they preserve their vitality much better packed simply in paper or in linen bags and exposed to the air, than when shut up in boxes, or in tin cases. But it is essential that the packages or bags be kept dry.

Roots (and frequently cuttings for moderate periods of time,) will retain their vitality if packed in dry earth or sand, but they should always be packed and forwarded at the time of year when they have their natural season of rest.

DAIRY MANAGEMENT.

BY A FARMER.

In consequence of the very destructive ravages of the weevil or wheat midge for some years past, it is highly probable that not a few in wheat-growing districts will be induced to abandon wheat-raising, for a time at least, and to devote their time, attention, and lands to dairying, stock raising, or some other branch of agricultural industry. In the case of some of those who may make this change in their mode of farming, it is likely to be accompanied with a few difficulties and perplexities, which may be all the more annoying from being unexpected and unprepared for. There may be some, for example, to whom the business may be so unfamiliar that they have no idea of what number of cows or other stock can be summered and wintered on any certain number of acres in pasture and in meadow. An error in either direction, that is, either by over-stocking their farms, or by under-stocking them, would be a source of annoyance and loss. In the one case the stock would suffer in condition, or the dairy produce be diminished, in consequence of the want of sufficient supplies of food; and in the other case, (of the frequent occurrence of which, however, there is no great danger in this country,) the source of the loss is too obvious to require to be mentioned.

If any one desirous of avoiding errors in regard to this point, were in pursuit of information so as to enable him to determine the amount of stock his farm—that is, so many acres of pasture, so many of meadow, and so many of corn and other grain, with roots, etc.—would carry, and resolved to determine this matter, not by mere guess-work, but accurately and by the light of the experience of farmers in dairy and stock-raising districts of country, he would find considerable difficulty, so far as our memory at present serves us, in finding such information on record in any of the agricultural journals which have for some years come under our eye. The most accurate source of information to which such an inquirer would be directed, we think, would be the Patent Office Report, (Ag.) for 1856. There he would find, for example, that in Gloucestershire, Eng., where nine-tenths, often, of all the land on dairy farms is in pasture

and meadow, twenty-five cows, at least, are ordinarily kept to each 100 acres, besides the usual number of heifer calves to maintain a full supply of milch cows. One and a half acres of pasture is the usual allowance to each cow, exclusive of all other stock, from May 1st to Dec. 1st. During the winter and spring months, hay is almost the only food given; and as each cow will consume two and a half tons of hay, it requires about the same extent of land—one and a half acre—for the winter as for the summer keep. In Cheshire, another famous dairy district in England, only twenty cows are kept to the 100 acres, or in that proportion, instead of twenty-five as in Gloucestershire. This, too, is exclusive of young heifers to keep up the stock of cows.

Further details may be found in the Report named. In making calculations based on these facts, allowance must be made for the fact that the climate of England is more favorable to the growth of grass than that of this country.

MORE ABOUT NATIVE STOCK.

BY J. W. PROCTOR, ESSEX CO., MASS.

EDITOR OF FARMERS' MAGAZINE:—I thank you, sir, for the kind expression of confidence, in my judgment, as to the value of the "old red cattle of New-England." From my earliest years, when a boy in my father's barnyard (say 55 years ago) to the present time, my attention has been particularly directed to this class of animals. It was a favorite idea of my old master, *Timothy Pickering*, that our best chance to obtain good stock on our farms, was to select the best animals we could obtain, and breed therefrom. It was in this way he said that the best improvements had been made in the herds of England. This was before animals of the improved breeds had been imported. I do not remember to have seen many of these until after the late war with England, that commenced in 1812. About 1820 they became quite common with those gentlemen who had most enterprise in these matters; still Col. P. held the opinion while he lived, that our best hopes were in rearing the best calves from the best cows in our stalls, provided bulls of like character were used as their associates. My intimacy with this gentleman led me to adopt these notions; and my observations and inquiries since, chiefly in my own county of Essex, have confirmed these impressions.

Essex is not a stock-raising county. Most of our heifers are brought in from Maine, New-Hampshire, and Vermont. Not moulded with a pedigree attached, but still moulded in form to meet the wants of an experienced eye, which is better than any pedigree. In this way is their selections made when the droves come along in the autumn; and if the heifers do not prove as expected after one year's trial, they are shoved off or turned over to the butcher. I have known many such selections. I particularly recollect the heifer selected by my neighbor, Benj. Goodridge, then an inholder, which afterwards proved to be the far-famed *Oakes Cow*, second to none that has been owned in Massachusetts for butter-making ability, more recently the Huntington Cow, now owned by my friend, R. S. Fay, President of our Society, scarcely inferior to the Oakes Cow. And this last season her calf, owned by P. L. Osborne, which, for one year next following her first calf, gave an average of between *ten* and *eleven quarts* of first-rate milk per day, on common feed only. I mention these instances because I know the facts stated to be so.

Far be it from me to speak disparagingly of any other classes of stock; but I do know those of best experience in this vicinity have best hope of good milkers and good butter products from the *old red stock of New-England*—what I am disposed to call *Natives*, until some more appropriate name can be found.

Pardon these hasty, off-hand suggestions. If they should chance to find favor in your sight, I will endeavor, at a convenient opportunity, to give you some views more elaborately digested.

RAIL FENCES.

BY W. TAPPAN, BALDWINSVILLE, ILL.

On the prairies of Illinois the people have commenced raising thorn fences, but I still express my admiration for rail fences. Long experience has proven them to be the best fences we can put on our farms. Let a good rail fence be built seven or eight rails high, with sizable stones put under the corners, rails eleven feet long—not too large nor too small—laid up with the desired zigzag crook. That is the kind of fence for the farm and for the people.

It is durable; it is tidy, and presents a fine appearance; it is a portable fence, and will long stand the storms and winds of our northern and southern climes. A rail fence sometimes blows down, so do board fences. Stake a rail fence down, with two stakes at each corner, with wire or wood binders, and it will stand even the howling tempests of the sea-like prairies of the west. Chestnut rails are not everywhere to be found, nor are ash rails everywhere abundant, but almost every country furnishes some kind of timber out of which rails can be made, and therefore I do approve of laying them up into good, straight and well-built rail fences. Not that board fences are not good do I thus speak, but that rail fences seem to last, are movable, and are usually considered proof against cattle, horses and sheep.

We all, perhaps, have our peculiar tastes and notions about fences, but I never did really fancy a stone-fence, and yet there are many good ones, particularly those which have been laid up with selected, flat lime-stone. I have seen some very fine fences of this kind in Steuben and even in our own county. On the farm of the Hon. Geo. Geddes you will find some nice and creditably built lime-stone fences. But there is one serious fault that can be urged against stone fences, which is that they make a great and long nest for elders, briars, and noxious weeds. By prudence and labor these pests might be prevented from springing up, but really it seems to be their most natural harbor—around a stone fence.

Rail fences are the cheapest fences in the long run that can be built. They will last a life time, though the kind of timber must be taken into consideration if we are to judge of their durability. Usually good chestnut rails, perhaps, are preferable, though there are other kinds of timber that have proven very valuable for rail timber.

One thousand rails will build nearly, if not quite, sixty rods of fence. Count your rails, delivered on the spot, worth $40 per thousand, and then your fence will cost you about 67 cents per rod. A board fence will cost in New-York State more money than this, and yet will not last half as long as the former kind.

Sandy land soon rots a post, whether that post be cedar or chestnut, "or what not." Along the road board fences usually look very pleasant, and therefore, as as a matter of taste, very many people use them.

I have recently seen a new contrivance for fences. It is a kind of board fence with panels, and can be put up or taken down in a great hurry. It presents a zigzag appearance when up, and hooks or ties are used for staying it. Of course it is a patent. Like all fences that are made of boards, it is quite expensive, though its agents insist that it is decidedly the cheapest fence yet brought into notice.

But fences considered in any light are very expensive. They cost an immense sum, and the annual repairing done upon them is an item which would build up many fine palaces and ornament scores of parlors and bed-rooms.

Many parts of the world are forced to do without them, and then trouble many times follows as a consequence. They are, above most everything else in agriculture, of the most importance, and yet thousands upon thousands of our farmers pay but a very little attention to their fences, and then comes on the tug of war—crops are destroyed, quarrels ensue, law-suits take place, profane language is heard—all in consequence of board fences put up in a bad way.

For the Farmers' Magazine.

FARM ECONOMY.

A few months since I saw the question in your paper, Why should the animal products of a farm equal its vegetable products? As no one has furnished an answer, I send you a few thoughts upon the subject. The most profitable farming in the end, is that which keeps the soil in the most productive state. This needs nourishment to sustain it, as well as the animal system. When in its native state the amount of vegetable matter that decays upon it, annually compensates for the fertilizing properties abstracted in its growth, and thus an even balance is preserved in nature. But by removing the products of the soil from year to year, without some compensation in return, we remove so much of its vitality, if I may so speak. This balance is destroyed. We subtract from its ability to produce, and the consequence is, it soon becomes exhausted of fertility. I speak of ordinary soils. There are places in our country where the soil will produce from year to year without any apparent exhaustion. But this is not true of a large portion of it. The soil, by being compelled to employ her strength for the production of annual crops, without any renovation of it, like the ill-fed and over-worked beast, soon fails. Compensation must in some way be made for what is thus taken from the farm. The soil must be fed, to keep it in a healthful condition, as well as the tillers of it.

The question then arises, How shall this be the most efficiently, and the most easily effected? In what way can a sufficient quantity of manure be obtained, to keep the land in a proper state of productiveness? It is believed that this can be accomplished in no way so surely as by having the animal and vegetable products of the farm suitably proportioned to each other. With proper care, a farmer may, in this way, make a great amount of manure, and an article too, that is much more reliable, than that obtained from any other source. If he procures it from the stables in a city or village, he usually gets an article that is firefanged, and much poorer than he can manufacture on his own premises. If he purchase concentrated manures, he is liable to be duped, and humbugged, and cheated out of his money, and thus left to future disappointment. But the intelligent, thinking farmer, knows what dependence can be placed ordinarily on that which he produces himself, and can make calculations accordingly.

In a wheat growing country, the straw and chaff may be left on the ground. But this, in its native state is comparatively valueless. It adds but little to the fertility of the soil. But by being cut, and mixed with meal, and then passed through the bowels of an animal, its value is greatly increased. I consider the animal stomach a better laboratory for the manufacture of manure, than those from which issue the so-called superphosphates of lime. By keeping animals on a farm, a vast amount of refuse matter, which in its native state is of little value, may be made of great utility. Straw, if not wanted for feed, may be used to litter stables and yards, and thus not only be made conducive to the comfort of the stock, but become an absorbent of liquid manure, which is by far the most valuable part of that produced by animals. Muck, forest leaves, potato tops, refuse cornstalks, and the like, may also in this way be turned to good

account, in keeping the soil in a healthful and productive state.

The pig-sty is also a laboratory for the manufacture of manure, of the value of which many of our farmers seem but little aware. The small number of hogs necessary to be kept for family use, may, if rightly managed, be made to pay in part for their keeping, by their labor. Swine are excellent composters, if you will furnish the materials for this. Give them plenty of refuse straw, chip manure, decayed vegetable matter, turf from the road-side or corners of the fences, the reeds and decayed vegetable tops from the garden, and other refuse matter which may easily be collected in moments of leisure, and at the end of the season you need not send to the city for the patent humbugs called fertilizers. You will have a mine of wealth on your own premises, that will render your soil productive.

Farmers who live at a distance from market, may consume an amount of vegetable products, in fattening animals, or in feeding the cows in the dairy, or the young stock on the farm, which would otherwise be lost. In this way, with the aid of a little labor, much may be turned into cash, that otherwise would be employed in some barter trade, or wasted. A mixed husbandry may thus be made productive of more gain than one single branch. The several departments act as aids to each other. They seem dependent—each being necessary to keep up the fertility of the soil, and to yield the greatest income. Without the aid of the manure produced by animals, the farmer may plow and hoe to but little purpose. The soil by being constantly robbed of its strength, refuses to yield its increase, and the cultivation of it must soon be abandoned. Mixed husbandry also affords variety of employment, and employment for all seasons of the year. In the winter months when the frost and snow claim possession of the soil, the farmer may be busy in caring for his stock, in collecting materials for manure, and preparing it for future use. Thus he will be constantly kept in a healthful activity. He will find employment for both mind and body, which will act reciprocally on each other, to preserve an even balance between them. Monotony soon tires, but variety gives zest to the spirits, and thus contributes to health and prosperity. HUBERT.

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There are but two thoughts in the above from which we would dissent in the least, and hardly from these, as the writer has very guardedly expressed them.

One is, where he speaks of straw to be used as an absorbent, but immediately recommends other substances, equally good for that purpose, but, unlike straw, valueless for feeding. Our idea is—and we presume he does not differ from us a single shade—that straw is worth something for the stomachs of cattle, and therefore should not be used for their bedding, but should be cut, moistened and mixed with Indian meal; or given in alternation with a little good hay, and a plenty of roots, and thus be made a valuable help in getting the stock cattle through the winter.

The other point is that of "mixed farming." We quite agree with the writer, that it is desirable, and we fully appreciate his arguments. Still we believe, as we have no doubt he does, that where the nature of the farm, its location, or the genius of the owner, point to a particular branch of husbandry, the general rule may give way, and the farmer may better turn his attention to that branch or those few branches, which circumstances seem to indicate.

We seldom meet with an article more to our liking than this of Hubert. May we not hope to hear from him again and often.

DIMINUTION IN WOOL!

THE *Wool Growers' Reporter* states the decrease of the wool crop in Ohio in 1857, as compared with 1856, to be two

hundred and twenty-seven thousand three hundred and seventy-three sheep, or six hundred and eighty-two thousand one hundred and forty-two pounds. The clip of 1856 was ten million five hundred and eleven thousand and twenty-eight pounds, and that of 1857 nine million eight hundred and twenty-nine thousand eight hundred and nine pounds.

TESTIMONIALS, QUERIES, REPLIES, &c., &c.

From and to Correspondents.

A FARMER, whom we have not had the pleasure of seeing, says, among other sensible things, the following:

MR. ED.:—I have just received the February No. of the *American Farmers' Magazine*, or more familiarly *Plough, Loom and Anvil*. I am much pleased with the improved appearance of the work, though *before* the change, it was second to no journal, in matter and appearance.

I have got all the volumes—10 of them—of the *Plough, Loom and Anvil*, that have ever been published, and there are no books in my library that I value more highly. In your prospectus for 1858, you propose to furnish the *Knickerbocker* and *Atlantic Monthly*, together with your own monthly, at reduced rates. I shall take both of them, when I renew my subscription.

My subscription to your magazine has been paid to May 1858, I think, but I am not certain as to that matter. Will you inform me, and I'll be on hand with a renewal? I think you are right with your terms. "Cash in Advance" seems to be the only true principle of publishing a newspaper or periodical.

A DIFFERENT LETTER.

The writer of the following treats us to a whole volley of questions; and that is all right, provided he will look into our past and future numbers for replies, and be contented with short answers for the present. He seems to be a sort of city farmer as yet, but when he gets into the thick of it, we hope he will make out better than the celebrated Mr. Sparrowgrass did; and there is some reason to think he will; for it can not be denied, that while some of these citizens are rather green when they get into the country, others do first-rate, even outdo the old farmers themselves.

MR. EDITOR:—Your "hints to young farmers" in the February number of the *Farmers' Magazine* just received, are the very thing I wanted, and I am sure many more as well. This encourages me to write to you for information, that I can not get from books. You tell us to read agricultural books, and I lately have done so, because I have been getting a little place in the country for my children to run about in, and I mean to farm a bit to help keep down expenses. But although I find a great deal in books about manures, and many other things that I don't understand now, whatever I may do by-and-by, I can not find out things that I *do* want to know; and as you are willing to teach us "know-nothings," I am encouraged to write.

As I have all my life kept a store in the city, it seems not very wonderful that I should have to ask, although you farmers may laugh at my questions. However, here they are:

I mean to keep a horse and a cow, maybe two. Now, of course, I want to grow my own keep for them; and as I see you farmers all now recommend cows to be fed in the yard all the year round, I mean to adopt that plan.

Now I want you to tell me how much hay I shall want for the horse, and how much for each cow. Then how much corn. And how much straw, or sedge, or something for bedding, etc. And how much land it will take for the corn, as near as you can say. They tell me my land gives about two tons of hay to the acre; so when I know from you the quantity for each animal, I can tell what land it will take to grow it. Then again do you advise me to feed any root crops,

and what to the cows? And how much land for them?

You see, Mr. Editor, all these things may be like A B C to an old farmer like you, but unless you tell me something about it, I am as likely as not to grow only half what I want, or if I grow enough, to sell too much off the land, thinking I shall not want it.

Excuse the trouble; I may be wrong, but I think it is this kind of every-day knowledge that publications like yours are wanted for. I mean just what we can not get out of books.

A City Trader.

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Let us see; "keep a horse;" that is well if you can afford it; "a cow, maybe two;" you may better say two, and then take care to get such good ones and keep them so well, that the profit will encourage you to keep a couple more; "want to grow my own keep;" certainly, or you will find it a poor business. As to keeping them in the yard, that depends upon circumstances—maybe well for small farmers near the city; but that the great mass of cattle in this country will perform the labor of gathering their own forage in summer, and charge their owners less than two dollars a day, or one for the work, till labor among us is cheaper than at present, is quite certain. Let us say to you here, if you keep two or three cows, keep as many or more swine. It would be well to have a few sheep, and don't fail to have a poultry-yard.

"How much hay to keep a horse?" Why, about as much as you please. If you give a horse the first best hay, and you should give him no other, and if at the same time you feed him nothing else, he will consume a hundred dollars' worth of such hay in a year, as prices range about here. But if you will give your horse four quarts of oats a day, and a peck of carrots, to be increased a little when he works steadily, he will eat less hay and be in better order, and will do more work. We should think, that with cut straw for a part of the feed, moistened and sprinkled over with Indian meal, and the oats and carrots above, you might get a horse through the year with two tons of hay, and that the whole expense of the keeping would be a little more than a dollar a week near the city, and considerably less, far back in the country.

If your land has been wont to give two tons of hay to the acre, that is pretty well. Two tons of good hay to the acre is a large income. But if the land is strong, and withal rather moist, we propose that you undertake to cut two tons early in July, one or one and a quarter at the end of August, and have a pretty good growth to feed off in autumn. You can do this, and when you have done it, we would like to hear from you again.

"How much to keep a cow?" A cow of good size, and giving milk freely, requires three tons of the best hay in a year, and more if you give nothing else; but could be got through the year with a trifle less, if you feed a plenty of roots, and a little Indian meal, as we would by all means advise you to do. Some have taught that oat or rye meal is better for the production of milk than corn meal; and if you estimate milk solely by the quantity, we think it is; but if you look at the real value of the milk—to make butter, or cheese, or to feed children with, or use for cooking purposes—June-cut hay, bright and clean, and 2 or 3 quarts of corn meal a day, are what you want; and we would recommend carrots rather to keep down the expenses of hay, than for any other purpose. They have no tendency to deteriorate the milk, and in the absence of corn meal perhaps improve it.

If your stalls are warm and conveniently constructed, you will use very little straw, sedge or anything of that kind for bedding, and that mostly for your horse. But remember to use large quantities of dry leaves, leaf mold,

swamp muck, or partially decayed turf, for absorbents in your yard, pig-pen and stable, if you would raise the corn you will need on the smallest possible piece of ground. If you will look over our Magazine, you will find where we have told you how to raise fifty bushels of corn on an acre, and from that all the way to a hundred, according to the land, at a cost which leaves a handsome profit. This latter has often been done, and you can do it, without making your cultivation so expensive as to leave no margin for profit, if you will follow our advice, and depend mainly upon the home fertilizers for enriching your ground. Buying manure from the Chincha Islands, and neglecting to make it from your own resources, is bad policy.

"Grow more than I want!" There is no danger, A man's wants are like a piece of India rubber in a lazy schoolboy's fingers. They will stretch to any measure, and besides you can consume, or find animals to consume, all you will grow. "Or only half what I want." No danger there either, if you husband the manure heap well, and practise deep and thorough tillage. Why man, if you have 25 acres of land, or even 20, or 15, if it is of a fair quality, and if you can begin with 1 horse, 3 cows, 5 swine, 10 sheep, and 20 hens, and will husband the manures, not only saving all the excreta, but adding about three times as much of something else every day in the year, in the way of a divisor and absorbent, your land will be growing better all the while; you may gradually increase your stock; and you will always have enough.

We advise you to have an eye to the old farmers, not to do as they do in all respects, but to do as well at any rate, and better if you can.

Another correspondent, on a subject so important in agriculture that we do not like to reply hastily, about which we here solicit the experience of practical farmers, inquires:—

"I hope you will excuse the liberty I take in writing to you, and if it is not too much trouble, I would like you to answer me a few questions on the subject of clover.

"Which is the best way to cultivate it? How much seed does it take to sow an acre? What does the seed cost? Is it a good manure for cotton land? When must it be sowed? And what kind of manure must be used in cultivating it? By answering the foregoing questions you will greatly oblige a reader."

A single word, on the last question, and then we leave the subject unbroken for our agricultural correspondents.

Clover is peculiarly a lime plant. It will not grow well unless there is carbonate of lime in the soil or manure. Hence, ashes are favorable to clover, because they contain a great deal of this compound. There is carbonate of lime, as well as all other substances required by plants, in the barn manures, and hence we should want no other for clover nor for anything else if we only had enough of these.

Shell or stone lime applied to previous crops is good for clover. We do not think that lime applied to the clover at the time of sowing, would help the first year's growth much. It requires time and exposure to become assimilable by the plant. Many farmers tell us that lime does no good on their soil. In some cases undoubtedly this is true. It does no good because there was already lime enough in the soil, or enough had been applied in the manures. But in far more cases this bad opinion of lime arises from expecting the effect too soon. The best effect of lime is not to be looked for till the third year; and the whole effect, in not less than ten years. But we have known men to apply it in May, and because the corn looked no better in June, to say lime does their land no good.

To show the slow but sure action of lime on clover, we will state a fact. A

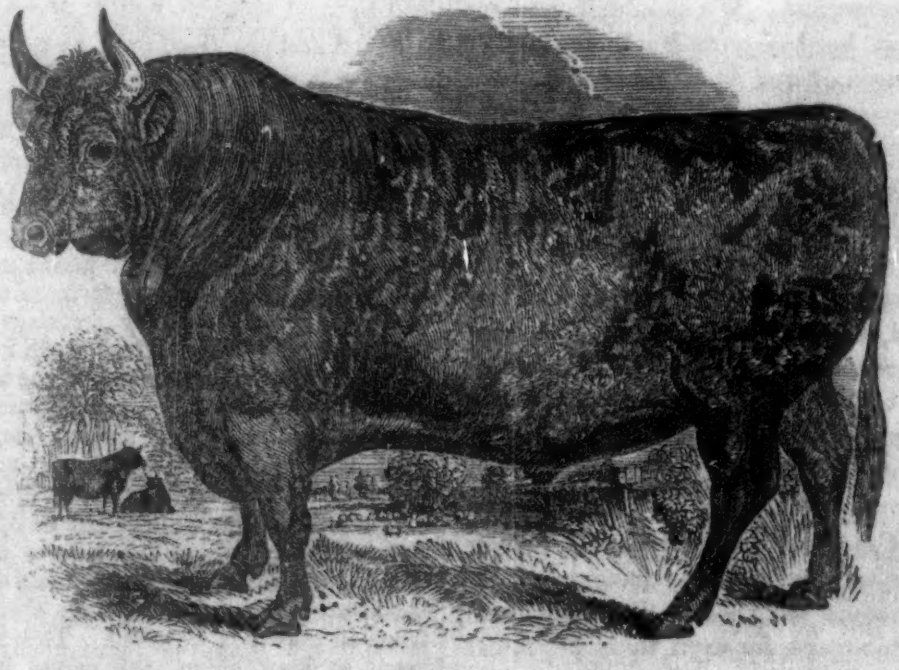
friend of ours was plowing a field in August, where a careless farmer, twelve years before, had applied a few bushels of lime to the acre, spread when wet, in lumps. The field had not been depastured that year, and yet nothing had grown upon it except in spots. Here and there, amid the general barrenness, were monstrous tufts of clover, so tempting to his cattle, that they could hardly be whipt by them, and the roots so rank and strong that the plow could hardly be drawn through them. Our friend dug for the cause, and found a lump of lime under every tuft of clover.

In plowing that whole field, and it was a large one, he found without a single exception, that wherever lime showed itself in the furrow there was clover, and where there was no clover no lime appeared. He drew the conclusion that lime is favorable to clover. He might have drawn another conclusion;—

That field had all the pabulum required for clover, except lime, but was destitute of lime, except where these lumps had lain unappropriated for twelve years. We draw another conclusion still;—

It is, that there is a great deal of land in the same condition. But we leave the field to practical farmers. Sound, practical farmers are better worth hearing on this subject than others.

BREEDS OF CATTLE.



DEVON BULL.

It was our purpose to have said something this month of the Improved Durhams. But our friend and namesake has furnished us so long an article on the Cattle of New-England, that we have not space even for a subject of so much importance.

The cuts in our last, as we then stated, were not designed to represent the Improved Devons, but rather to give the general features of the old Devons, which were the basis of the Improved, or North Devons, as they are called, and which we believe have diffused their blood more radically into the cattle of New-England, and of this country generally, than any other race.

The bull represented above we do not

consider a fair type of the North Devons, as they are seen in many American and English herds, but rather of a grade of the Devons in the way of a higher improvement. The swell forward of the shoulders, and the falling in of the hind legs below the round, are no part of the improved North Devon. If any of our herdsmen who have cuts of their finest, pure blood, improved North Devons, will send them to us, we will publish them in our next. We have no fear that the artist will have surpassed nature in the fineness of his picture, for there are scores of these animals in our own country, as well as in England, finer in their forms and proportions; and if more cuts are sent than we have room for without intrenching too much upon our reading matter, we will enlarge our next number for the purpose of giving them room. We should like to see a whole herd of pure North Devons, in the pages of our April number; and if the insertion serves as an advertisement of these cattle, we have no sort of objection. Why should we object to giving publicity to a good article? and such certainly are the North Devons.

Of course we do not agree with our friend of the long article, on New-England cattle, from whom by the way we hope to hear again, in every particular. We are not as fearful as he, that Americans will be humbugged by the English. It appears to us, that we *A*mericans are about as *smart* as Englishmen are *clever*, though we believe they have asked and Americans have paid a little too much, in some cases, for even their finest cattle. But we have only to refuse such prices, and they will come to their senses when they see we have. The competition among American breeders has been one of the main causes for keeping English cattle at fabulous prices.

Our friend has done a good thing in notifying us of what is unquestionably true, that England is not the only source of fine cattle. While some breeders are availing themselves and the country of cattle from abroad, that have had the benefit of correct breeding for generations, we have not the least doubt that others will bring equal, if not superior results from our own long-neglected cattle.

Whether cattle have ever been slaughtered in New-England, weighing as much, when dressed, as his article represents, is more than we know, and we believe nothing without proof. We *were brought up* to think 250 lbs. of beef to the quarter doing pretty well; and we shall leave it to the writer of the article to prove that an ox has ever graced the Brighton (Mass.) market or any other with about four times as much. But we regard his article as exceedingly valuable; and we believe that there is truth enough in it to lead to most valuable results, if candidly received and practised upon by the farmers of this country.—Ed.

ANIMALS IN WINTER.

Farmers do not sufficiently sub-divide their yards in winter. Large and small animals are turned in promiscuously together, and, as every farmer knows, the large ones are very ferocious and domineering towards those much inferior, but careful not to provoke the wrath of such as are nearly equal. Turn those together which are of similar size, and they will be more quiet all round. Calves generally are too much neglected, and come out small and puny in Spring. A good manager has constructed a spacious stable for calves in one of his sheds, moderately lighted, and well sheltered from all currents of wind. This apartment is kept clean, the calves fed on good hay, and supplied with good water. They present a very different appearance from other calves in spring.—*Tucker's Annual Register.*

☞ The autumn is the best time for painting all wood that needs this protection. Paint, therefore, soon, all fences, posts, gates, sheds and buildings that need painting, whether new or old.

Horticultural.

CALENDAR FOR MARCH.

FLOWERS.

As soon as the winter breaks up the flower borders should be dug up and manure added. Perennial herbaceous roots may at the same time be divided and arranged; and this is the time to obtain any new ones that are wanted from the nurseries.

Cuttings should be rooted under hand or bell glasses of many things that will add much in summer to the beauty of the flower garden, as *Heliotropes*, *Fuchsias*, *Petunias*, *Mimulus*, *Chrysanthemum*, *Pansey*, *Phlox*, *Antirrhinum*, *Verbenas* and others. These will root in a room window under a tumbler glass in any light garden soil to which a fourth of coarse sand is added. The glass should daily be taken off and the inside of it wiped dry, and then immediately replaced. Whilst the inside of the glass is found to be moist, no water will be required.

Tender or Hardy Annuals may be sown in a cold frame now, to remove afterwards into the borders, which will enable them to bloom earlier than those sown next month for general bloom.

Greenhouse.—The plants will be growing more rapidly, and therefore their young shoots will be more susceptable of frost, on which account fires must only be discontinued when that can be done with safety. But the more gradually the growth is made, the finer will be the bloom, on which account it is desirable to use as little artificial heat as possible. For the same reason, in mild, sunny weather, more air should be admitted in the day. At all times avoid winds and sharp currents of air.

More water will be required as the plants advance, and the syringe should be used freely every day, except in severe weather.

Keep the new growth of all plants well tied out, which, by admitting light and air to their centers, encourages a strong growth and a bushy habit.

Fruit Garden.—Prune all fruit trees not yet done. If any are to be planted, let the ground for them be prepared, so that they be got in as soon as the spring weather is sufficienaly advanced to render it fit to remove them.

Strawberries may be planted the end of this, or beginning of next month, according to the situation and the weather. Old beds that were covered over in the fall, should be uncovered as soon as the severe weather is past, and the earth between the plants should be stirred three inches deep with a garden fork.

Raspberries laid down in the fall should be uncovered, and the canes tied up for bearing.

KITCHEN GARDEN.

As soon as the frost permits, according to the locality, the ground should be dug over and manured, preparatory to getting in the crops. But it is better, if the ground is very wet, to wait a few days, for it works to better advantage when not saturated with water.

Unless seed has been sown in frames for early crops, that should now be done immediately; especially Lettuce, Early York, and Early Ox-heart Cabbage.

Radishes may be sown in a warm border as soon as it can be got ready.

In a hot-bed, Tomatoes, Egg-Plants, Peppers, and other things that may be wanted early, may be sown.

Cabbage and Cauliflower plants that have been kept in frames through winter, should be thinned out to give them room, and the earth between those left stirred an inch or two deep. The plants taken out may be put into another frame to stand a few weeks, till they can be planted out, or they may be put in rows six inches

apart, and be protected at night with boards or some litter scattered over them.

Potatoes for the early crop may, in many places, be planted towards the end of the month.

Spinach, Turnips, Radishes, Peas, Mustard, Lettuce, Cabbages of various sorts, and Parsley, may be sowed in small quantities for first crops, or to follow plants now in frames of same sort.

Asparagus beds may have a good dressing of salt, (a pint to every square yard,)and the litter or manure laid on in the fall should now be forked in under the surface; but with care, so as not to injure the crowns of the plants.

Rhubarb beds not forcing, may be treated in the same way, (except the salt.)

Herb beds may be sown. Sage, Summer and Winter Savory, Thyme, Sweet Marjoram, Mint and Pennyroyal, as the most useful.

All Kitchen Garden seeds whether to stand where sown, or for transplanting, should be sown in rows, and not broadcast. The plants will be much stronger, better in quality, and earlier at maturity by adhering to that plan.

If it is wished to have Celery very early it may now be sown in a hot-bed.

THE GARDEN, ORCHARD, FLOWER YARD, ETC.

We copy the following from the *Cotton Planter and Soil of the South*, one of the very best journals of the kind that comes to our table. In that climate the suggestions are adapted to January, but if our northern readers will attend to them in March, or even early in April, they will do well:

Garden Work for January.—At the expense of telling an "oft told tale," we begin our year's gardening again. Truth loses some of its force by repetition and new discoveries in horticultural science are too rare to fill up a monthly Journal like this. The fact is, the true principles of culture, are as yet, so little understood and practised by the multitude, that there will be novelty for a long time to come, even in making a garden. The vegetable garden should now be highly manured and the manures well turned under, coarser manures may be used now than at planting time. At the extreme South, hot-beds may now be got ready for starting early lettuces, radishes and early cabbage. Let the ground work be fresh stable manure, cover this with good garden mold, and place the sash and frame over. A common window sash will answer. The box or frame should slope towards the sun. Some straw or matting should be convenient to cover the glass in very cold nights. Plants as hardy as cabbage, lettuce, cress, etc., may be advanced so as to come into the transplanting bed nearly as soon as the seeds sowed in the open ground have sprouted. Those who have garden plots that are all clay, should now cart on sand, and those whose plots are all sand, should cart on clay. The clay will bind the sand, and the sand will loosen the clay. Both are as essential to the productiveness of a garden as manures. The constant cropping of a garden is very apt to exhaust some quality of the soil that manures do not supply again. In this case, where it is convenient cover the whole surface with virgin earth from the woods or swamps.

New Asparagus beds may now be made; select a locality with a clay subsoil, excavate the bed as large as it is to be, two feet deep, fill this in with old, well rotted manure, until nearly full, then cover with good mold and set out the roots; seeding roots of one year, are preferable; plant them about eight inches apart each way; let the roots spread as they originally grew, and cover the crown bed about two inches. The second year, the bed will yield a fine cutting for the table, and continue to improve, with good management, for twenty years to come. We look upon asparagus as the most delicious vegetable grown in the garden. It is simple and easy of culture. The bed properly made, most of the work is done. Onion sets, buttons and bulbs, should now be planted. Plant all the shallott tribes, both by the button and dividing the roots. Hen manure is especially adapted to the onion family; pulverize it well, spread it evenly over the surface of the ground and spade it under; plant the button or set in drills wide enough for

the hoe to go between, six inches apart in the drill.

Irish potatoes may now be planted under straw. Plow the ground well, open furrows two feet wide; in the bottom of this furrow scatter wheat bran, on this drop the potatoes a foot apart, level the ridge down and cover the whole surface two feet deep, with wheat, oat, pine or straw or oak leaves. The rains will beat down the loose straw to a few inches, but there will be a moisture between the straw and leaves, and good mealy potatoes will be grown.

THE FLOWER YARD.—This will be a cold month for flowers, but preparation must be made for Spring and Summer flowers. Lose no time in planting out all hardy shrubbery; imported flowering bulbs may yet be planted. All bulbs bloom best in a sandy soil. Early blooming bulbs, like the hyacinth, tulip, crocus jonquille, polyanthus, narcissus and the lily, may be planted on borders in the shade of shrubbery and trees, without detriment to their bloom, as they bloom so early. Their bloom has come and gone before the trees need all the moisture, or have put out foilage enough to shade them. Late flowering bulbs, such as the Amaryllis and Gladiolus, want all the sunlight and air they can have. Chinese Peonias may now be taken up, separated and replanted. In separating, take care to leave a bud with each root to be planted; these are very desirable and showy flowers, and bloom best in a sandy soil; some of the varieties are perfumed like the rose. Dahlias that have not been taken up, should now be taken up and placed in a dry place, secure from frost, until planting time in March and April. Cuttings of all kinds of shrubbery may now be planted. Virgin earth should be worked in around roses and hardy vines. The earth may be made too rich for flowers producing a large growth of wood and foilage, with but few flower buds. Beds for annuals should now be manured and well spaded under; well rotted cow manure is the best animal manure for flowers. Hardy annual seeds may now be planted. Applications of liquid guano around the roots of flowers after they have budded, will increase the size and brilliancy of the bloom.

THE FRUIT ORCHARD.—We do not mean when we head this article, to only converse with those who have acres in fruits trees—but to all who have a single apple, pear or peach tree. It is a good time this month to look over the trunks and limbs of the apple, pear and peach tree. If the bark of the tree is rough and mossy, there is something at fault in the food. The earth should be carefully removed from the roots, and its place filled with rich virgin earth, with some strong wood ashes. If this can not be got, fill in with old, well rotted manure. Take an old knife and scrape the trunk clean of moss, and all parasites, and give it a rubbing with soft country soap. Examine the limbs of the Pear; if they are found wilted or shriveled, cut them back to sound wood. Remove the earth around the base of the Peach tree, and if a black gum is found oozing from the roots, scrape it carefully away and probe the wounds with a sharp knife, a long white flat worm will be found, which has caused the gum; pour boiling water into the holes where the knife can not reach, and on the gum removed, to kill any of the worms that may be concealed; fill in around the tree with fresh earth. There are many fruit trees standing in yards and gardens, that yield but a poor return of fruit, from the fact that their falling leaves are carefully swept away, and they have none of nature's food to feed the next crop of fruit. All the leaves that have fallen in the orchard, should now be worked in the soil; they may be worked in with a light plow, but near the tree should be turned under with a pronged fork to prevent cutting the roots. If the soil is poor around fruit trees, there is no crop that will pay better for manure. The question will be, how to work the manure under, without mutilating the roots, for it is the surface roots of trees that feed for the fruit, hence the importance of planting fruit trees in a soil naturally rich. But art will overcome almost every obstacle; fork up the soil around the tree as far as the roots extend, (and they run horizontally, as far as the limbs extend from the ground,) and apply liquid manure; this may be applied at any season with safety. No time should now be lost in planting out fruit trees. More than half of the trees planted, are ruined by being planted too deep. Deal only with such nursery men as take them up with care, preserving all their roots, and plant them just as they stood in the ground, with all their latterals spread, and not one inch deeper than they stood in the nursery.

If an orchard is to be planted, it should be well sub-soiled, and the holes for the roots dug twice as large as the roots extend; good surface mold should be filled around the roots. All bruised roots should be cut clean before being inserted in the ground, and if the tree has lost much of its roots, the top should be cut back to correspond. Do not be anxious to plant large trees. A tree as large as the little finger, is more certain to live, and if a grafted tree, will produce fruit quicker than one as large as the arm. Plant the tree firmly at once, and not rely on *ramming* it afterwards. If the soil is well sifted around the roots, it cannot be rammed too firmly at once—the little rootlets which are to be its feeders, will find something to hold upon, and will go to work immediately.

The Strawberry Bed.—There is no better time in the year, to plant out strawberry vines than this month. The pistillate varieties should be planted in the vicinity of the staminates. Hovey's Seedling is a pistillate, and will not produce fruit without being impregnated with a staminate. Every tenth row of staminates will impregnate the Hoveys well. Our new Hautbois is a staminate, and is a good impregnator for pistillate varieties. This plant being a vigorous grower, requires more room than most strawberry plants. The ground designed for the strawberry bed, should be covered with vegetable matter, with a coat of ashes, either bleached or unbleached, the whole well turned under; the Hautbois should be planted two feet by three; other varieties may be planted nearer. As the plants begin to run, the soil should be kept mellow that the runners may take root freely. When cultivated entirely for fruit, the runners should be kept down; as fast as the runners appear pinch them out; this is easily done when they are young and tender, with the thumb and forefinger; when the plant begins to bloom, unless it rains often, water freely just at night; frequent watering will cause the fruit to set, swell rapidly and ripen quick. When the strawberry is cultivated on a large scale, new fresh land should be selected if possible. All animal manures should be discarded in strawberry culture when the plant has once got possession of the ground; all the space between the plants should be mulched with decomposing leaves. Chip manure from an oak or hickory wood pile is one of the best of fertilizers for the strawberry.

Shade and Ornamental Trees.—There are many trees indigenous to the South, suitable for shade and ornamental purposes. It is not alone the flowering tree that is ornamental, there are deciduous and evergreen trees, highly ornamental; the live and water oak, are both shade and ornamental; the tulip tree and sweet gum, are gems in the leafy coronet. Among the evergreens, the magnolia, cedar, holly and wild olive are perpetual emeralds, and even the common pine of the country is not to be despised. All these evergreens grow readily from seed; they may be planted on dry upland, and will grow and flourish where they will not bear transplanting. There are some beautiful evergreens being introduced from abroad, but not one that we have ever seen, that will compare for beauty with the wild olive. It is beautiful as an evergreen, with its dense glossy foilage and graceful form. It is beautiful in flower, showing its myriads of white blossoms among the glittering foilage. It is beautiful when in fruit, producing thousands of bright black berries, which clustering among the green foliage gives winter the air of summer. It is easily propagated from the seed. The seeds of all evergreens should be planted in the fall. When trees are removed from damp localities to dry uplands, the earth in which they grow, should be carried with them, so that the roots may be embodied in it, until they have taken hold of the ground. The *fancy* pruning of an ornamental tree, is bad taste. It is folly for man to attempt to improve upon one of the most perfect and beautiful creations of God. Lose no time in planting out trees; plant them on the road side for shade; plant them on the avenue for shade and ornament too.

FRUITS WHICH SUCCEED WELL IN NEW-JERSEY.

BY D. PETIT.

The following, which we take from the *New-Jersey Farmer*, will be valuable, as embracing the conclusions of the American Pomogical Society, especially to such of our readers as live in the latitude of New-Jersey; and the remarks of the writer respecting the influence of climate

and location on fruits will give it a high value for all:

At the American Pomological Society, second session, held at Philadelphia, in 1852, "The Committee for the State of New-Jersey report the following list of fruits that have been tested by us, or under our immediate notice, and have produced well; are good varieties of their several classes, and are worthy of general cultivation in our State:"

Apples.—Bough, large yellow, Early Harvest, Fall Pippin, Hagloe, Red June Eating, Monmouth Pippin, Maiden's Blush, Newtown Pippin, Rhode Island Greening, Sheepnose, Striped Harvest, Tewksbury, Winter Blush, White Seeknofurther, Woolman's Summer Rose.

Apricots.—Burlington, Peach, Moorpark.

Currants.—Black Naples, Large Red, Knight's, Large Red, Wilmot's, Sweet Red, Knight's, White Dutch.

Grapes, Native.—Catawba, Isabella, Elsenborough.

Peaches.—Alberge, Early Tillotson, Early Red, Troth's, Early York, (Seratte,) Large Early York, Late free, Ward's, Late Heath Cling, Late Malecaton, Morris White, New-York Rare Ripe, Oldmixon cling, Oldmixon free, Red Cheek Malecaton, Harker's Seedling, Tippecanoe, Cling, White Malecaton, Coles.

Pears.—Andrews, (American,) Bartlett, Beurre Bose, Beurre d' Anjou, Beurre d' Aremburg, Beurre Easter, Beurre Golden, of Bilboa, Bloodgood, (American,) Doyenne d' Ete, Duchesse d' Angouleme, Elizabeth, Mannings, Flemish Beauty, Fondante d' Automne, Glout Morceau, Lawrence, (American,) Louise Bon d' Jersey, Winter Nelis, Dearborn's Seedling, (Am.,) Seckel (American,) Tyson, (American,) Urbaniste, Washington, (American.)

Plums.—Drap d' or, Golden Drop, Coe's, Green Gage, Imperial Blue, Large Yellow Gage, Orleans, Smith's, Washington.

Quinces.—Apple Shaped, Pear Shaped, Portugal.

Raspberries.—Antwerp Yellow; Antwerp Red, Fastolf, Franconia,

Strawberries.—Late Pine, Furner's Methven, Scarlet, Hovey's Seedling.

At the third session, held at Boston, in 1854; Wm. Reid and Jabez W. Hayes, for the northern part of the State, have added the following to their list:

Fall Apples.—Orange Pippin, Gravenstein, Fameuse.

Winter.—Hubbardson's Nonesuch, Wine Sap, Baldwin, Roxbury Russet, Northern Spy, Bellflower.

Thomas Hancock, for the locality of Burlington, added:

Lady, Autumn Pearmane, Smith's Cider, Monstrous Pippin, Cooper's Redling, Roman Stem, Summer Pearmane.

Reid and Hayes adds:

Peaches.—Early Newington, or Honest Johns, Crawford's late.

Thos. Hancock added:

Yellow Rare Ripe, Columbia, Early Malecaton, Crawford's Early, Imperial, Honest John, or Geo. IV., Nonpareil, Scott, Red Rare Ripe, Stump of the World.

Reid and Hayes add:

Summer Pears.—Madeline, Early Catharine, Dearborn's Seedling, Beurre Gifford.

Fall Pears.—Belle Lucrative, St. Ghislain, Marie Louise.

Winter Pears.—Vicar of Wakefield, Beurre Diel.

Hancock adds:

Early Catharine, Lemon, Henrietta, (Edwards,) Rostiezer, Stevens' Genessee, St. Ghislain, Oswego, Muscadine, Osband's Summer Trimble, Echassery.

The fourth session, held in Rochester, in 1856, adds but few to the list.

Having no published list of fruits suited or adapted to the southern counties of New-Jersey, I am induced to send the following list, comprising such as have succeeded well with us; though there are many other kinds of pears and apples which promise well, but have not been sufficiently tested to place on the list, but may be added at some future time:

Summer Apples.—Woolman's Summer Rose, Lippincott Early, Early Harvest, Prince's Early, Bough, large sweet, Summer Queen, Bevan.

Fall Apples.—Codling, Spice, Vandyne, Blush, Fall Pippin, Cabbagehead.

Winter Apples.—Roman Stem, Turn of Lane, Winter Queen, Lady, Lambert, Smith's Cider, Sweet Can, Wine Sop, Ridge Pippin, Tewksbury, Winter Blush, Jersey Russet, Gray House, Rhode Island Greening, Cooper's Redling, Lippincott Sweet.

Summer and Fall Apples.—Summer Pearmane, Jersey Sweeting, Hagloe, Holland Pippin.

Fall and Winter Apples.—Hay's or Wine, Redstreak, Morgan, Cumberland Spice, Fall Brown, White Seeknofurther.

Summer Pears.—Madeline, Catharine, Bartlett.

Fall Pears.—Duchesse d' Angouleme, Seckel, Finne d' Naples, Urbaniste, Bon Louise d' Jersey, Graslin, Epine Damas, Flemish Beauty, Napoleon, Doyenne Boussock, Beurre Bose.

Winter Pears.—Gratolego Jersey, Knight's Monarch, Duchesse d' Mars, Beurre Easter, Glout Morceau, Passe Colmar, Chaumontel.

Peaches.—Froth's Early, Early York, Geo. IV., Red Rare Ripe, Oldmixon, Cling and Free, Malecaton, Mignone, Ward's Late Free, Cook, Petit's Imperial, Crawford's Late Free, Mammoth White, Smock, Lateheath.

Cherries.—May Duke, Early Richmond, Kentish or Pie Cherry, Black Tartarian, White Heart, Bleeding Heart or June Duke, White Begarreau, Napoleon Begarreau, Carnation Elton, Belle d' Choicy, Bullock Heart, English Black Heart.

The Newton and Green Pippins, Spitzenburgs, Bellflowers, and some other apples, which do well at the North, fall from the trees too early in this latitude to make good winter fruit, except in cold seasons, when they have done well The Gilpin or Carthouse has not borne well for several years, and the fruit has been defective. It was formerly one of the best bearers. The fall Seeknofurther, formerly one of the best, appears to have run out—trees very defective in growth. The fall Pearmane does not keep well. The American Pippin does not bear well. The Bevan, which originated near Salem, is thought to be the best of all summer apples, for baking—will keep longer, and will command as high a price in the Philadelphia market as any other early apple. The Holland Pippin—the largest of all summer apples—has borne well lately. The Codling bears well—fruit is sometimes defective or knotty. The Spice is a flat apple—very fair and good for drying—trees bear abundantly. The Vandyne is one of the best apples known. It is yellow with a blush—a good size and very tender—in season about a month; trees grow well, with yellow shoots. The Blush and Fall Pippin are too well known to be noticed here, except the Fall Pippin sometimes passes under the name of Golden Pippin. The Cabbagehead is a flat apple, from yellow to very yellow, when fully ripe, very crisp, rich and juicy—a good market apple. The Wine, Hay's or Redstreak, is a popular apple. The Morgan is a good one. The Cumberland Spice is good, but rather a shy bearer. The Fall Brown is always fair and good. The White Seeknofurther, when in perfection, has not a superior. The Roman Stem is A., No. 1, in all respects except size. Turn of Lane and Winter Queen are both small and good—good bearers. The Lady is a good fancy apple. The Lambert is a new fruit, and promises to be second to none, when considered in all respects. It is a large red good keeping apple. The Cider is a great bearer—fruit large. The Sweet Can is good for apple-sauce and cider—an excellent bearer. The Ridge Pippin is a large, ribby apple, and promises well. Jersey Russet is one of the best, though small. The Gray House is a great bearer, even when others fail—this fruit is better than none.

Pears.—The White Doyenne, Brown Beurre, and some other varieties, crack so badly that they are hardly worth cultivating. The Rouselit Hatif of Downing, or Early Catharine, is a well known pear in this section, better than the Bartlett with me—which is somewhat astringent, though the tree grows and bears well, particularly on the pear stock. The Duchesse d' Angouleme is very large, and a first rate pear in all respects; so is the Bon Louise d' Jersey. The Graslin has reached ten feet in height, in three years, on the quince, and has borne excellent fruit. The Beurre Bosc is large, and a first rate fruit on the pear, almost equal to the Seckel, but will not grow on the quince without double working. The Duchesse d' Mars, of Downing, is a small pear or nearly medium; flesh very melting and juicy, somewhat buttery, with a rich and perfumed flavor—October to November. I have a tree from France, under that name, which bore fruit last year larger than the Bartlett, and very handsome. They are later than the Beurre Easter, as I have not succeeded in ripening them yet in a stove room, and it is now Christmas; the tree is a strong grower. So is the Chaumontel and bears large and good fruit. The Bloodgood is recommended elsewhere, but what I purchased under that name proved a fall variety.

Peaches.—The Cook peach is one of the best. It is a large white and red free stone, ripens about the time of Ward's late free. It received its name from Joseph Cook, of Philadelphia, who furnished the buds from a seedling tree

in that city. "Petit's Imperial," is of the first size—is considered here the best colored and richest peach known. It has sold higher in the Philadelphia market than any other peach ever placed the side of it. The tree is a strong upright grower; it originated here, and first came into bearing in 1843.

Salem, N. J., 12mo, 25, 1857.

Mechanical.

ADJUSTIFIABLE SELF-RAKING REAPER AND MOWER.

We call attention to Manny & Co.'s advertisement of this machine, the model of which we have examined with great care, and we see not why it may not prove all that the patentee and manufacturers claim for it.

Our opinion has heretofore been that the self-raking apparatus must necessarily make a mower and reaper more complicated than is admissable for a machine to be subjected to such "rough and tumble" usage.

But our examination of this machine leads us to doubt the correctness of our former judgment; and if the self-raking operation can be made to save the labor of a man in harvest time, it is an object. —Ed.

PLANING MACHINE.

We have examined a new planing machine, patented by H. H. Baker, of Newmarket, New-Jersey.

This machine seems to us to combine great simplicity with efficiency of action. The smallest size, for dressing sashes, blinds, small casings, etc., can be worked with the foot, and from samples dressed by it, we judge that it does its work well.

Machines for working larger stuff are moved by a one-horse power. The prices vary with the size, from $25 to $7 50. This machine is eminently portable, weighing but about 400 lbs., and very compact when put up for removal. It strikes us as the very thing for house carpenters, and others doing an itinerant business, as the cost is but trifling, and the machine dresses wood, goring, bevelled, or almost any shape, as well as the regular oblong form.—Ed.

WEST'S IMPROVED PUMP.

There are but few places either in town or country where the aid of a pump is not required. Hence the large supply of them and the multiplicity of patterns. Simplicity and durability are essential requisites in a good working pump, if one is to have continued satisfaction in the use of it.

We have had in use for months past one of West's pumps, which has given us more satisfaction as a force or lifting pump, than any we have ever used. It is one of great power and well adapted for ship decks, mines, factories, greenhouses, graperies, &c. &c. The *Mining Chronicle and Railway Journal* says:

"It is commended for its extreme simplicity of construction, great strength and consequent durability, and cheapness of repair. Although it has but two valves necessary to its action, (an additional foot-valve being put in for greater security,) it is perfectly double-acting, throwing a continuous stream, with great force. There is no stuffing-box in this pump—the pressure being held by a cup packing, like that upon the working piston, working in a cylinder fitted for the purpose within the upper air chamber—which we think must be a great improvement, as stuffing is so liable to be deranged and to leak under a strong pressure, and to say nothing of the great loss by friction incident thereto. It also has two air-chambers—the one as before mentioned surrounding the upper cylinder and communicating with the pump above the valves, the other surrounding the lower or working cylinder, and communicating below the valves; thus the action of the valve is cushioned upon both sides by air—preventing water-hammer and vacuum thump, and ena-

bling a much smaller and less expensive pipe to supply the pump. The valves are very accessible, and simply and cheaply repaired. They work much easier than any other pump we have ever seen, the 4 inch cylinder size being worked by children in wells 100 feet deep, and as they are extremely cheap, as well as simple and strong, we freely recommend them. They are manufactured and sold only by A. W. Gay & Co., 118 Maiden Lane, at the Warner Pump Depot.—*N. Y. Observer.*

PATENTS.

Implement for Holding open Shoes, &c.—John Allender, of New-London, Conn.

Sewing Machines.—Benjamin J. Angell, Attleborough, Mass.

Pumps.—William Boyers, of Mount Carroll, Ill.

Hydro-carbon Vapor Lamps.—Robert R. Crosby, of Boston, Mass.

Cards for Currying Cattle.—C. S. Dickerman, of Lansingburg, N. Y.

Grinding Mills.—H. V. Duryea, Fulton, N. Y.

Railroad Car Axle Boxes.—George W. Geisendorff, of Indianapolis, Ind., and Jacob C. Geisendorff, of Cincinnati, Ohio.

Lubricating Apparatus for Journal Boxes of Railroad Cars.—Jacob C. Geisendorff, of Cincinnati, Ohio.

Machine for Cutting Tenons on Spokes.—Mahlon Gregg, of Philadelphia, Pa.

Shingle Machine.—William Gregor, of New-York City.

Potato Planters.—Edward E. Hawley, of New-Haven, Conn.

Stave Machine.—Elias Moore, William Clark, and James Lyndsey, of Shelbyville, Ind.

Mode of Burning Brick.—A. J. Mullen, and R. Hall, of Greensboro', Ala.

Musical Instruments.—Ureli C. Hill, of Jersey City, N. J., and Charles F. Hill, of New-York City.

Hominy Mills.—Philip Homrighaus, of Royalton, Ohio.

Washing Machine,—Edward Julier, of McConnellsville, Ohio.

Straining Reciprocating Saws.—G. P. Ketchan, Jr., of Bloomington, Ind.

Removable Window Sash.—Robert H. Kirck, of Utica, N. Y.

Scrapers for Grinding Mills.—Thomas E. Little, of Janesville, Wis.

Flour Bolts.—Samuel G. McMurtry, of Memphis, Tenn.

Operating Railroad Station Pumps.—William McVeigh, of Boone, Ill.

Attaching India Rubber Soles to Boots and Shoes.—Abram T. Merwin, of New-Haven, Conn.

Manufacture of Wrought Iron Railroad Chairs.—James Milliken, of Philadelphia, Pa.

Clamp for Holding Rectangular Pieces of Wood while being Bored, &c.—Henry Miller, of Grafton, Va.

Churn.—Enos Page, of Streetsborough, Ohio.

Machines for Cutting Brush from Cotton Fields.—Elias Peck, of Canton, Ill.

Pedals for Organs, &c.—Thomas Robjohn, of New-York City.

Lead Pipe Machine.—Charles E. Rockwell, of New-York City.

Joints for Sheet Metal Roof.—Stephen Scotton, of Richmond, Ind.

Washing Machine.—W. H. Tambling, of Berlin, Wis.

Painting and Varnishing Machine.—H. Thayer and L. L. Martin, of Warsaw, N. Y.

Collapsible Boats.—N. Thompson, of Brooklyn, N. Y.

Lap-Joints for Belting.—Henry Underwood, of New-York City.

Grain and Grass Harvesters.—Aaron VanDuzen, of Goshen, N. Y.

Corn Huskers.—F. M. Walker, of Greensboro', N. C.

Plows.—George Watt, of Richmond, Va.

Machines for Planting Potatoes.—T. B. Whyte, of Greenwich, N. Y.

Bottle Stopper.—J. B. Williams, of New-York City.

Cotton Gins.—L. J. Chichester, (assignor to H. G. Evans, Saml. Barstow, and D. L. Winteringham,) of New-York City.

Corn Huskers.—A. R. Davis, (assignor to himself and B. D. Moody,) of East Cambridge, Mass.

Corn Huskers.—Daniel Lombard (assignor to himself and G. F. Richardson,) of Boston, Mass.

Fire-Arms.—F. D. Newbury (assignor

to Richard V. Dewitt, Jr.,) of Albany, N. Y.

CANE GUN.—John F. Thomas, (assignor to himself and Saml. Remington,) of Ilion, N. Y.

HAND CORN PLANTERS.—Joshua Fairbank and E. C. Durfee, of Leon, N. Y., administrators of the estate of J. B. Fairbank, deceased, late of New-York City.

HYDRANTS.—Kingston Goddard, of Philadelphia, Pa.

Scientific.

SCIENTIFIC.

WE are obliged this month to omit our Chemical article for want of space. It shall appear in our next.

For the American Farmers' Magazine.

THE ANALOGY BETWEEN PLANTS AND ANIMALS.

THE analogy existing between plants and animals, in many respects, is very striking. In some instances the resemblance is so near that it is difficult to discriminate between them. The link which binds the two kingdoms together is so very small, that the most skillful physiologist can scarcely tell where animal life begins, or vegetable life ends. The spongi and other sea animals are instances. This connecting link seems to extend throughout the animal kingdom. Man and brute seem to be linked together in the monkey family; quadrupeds and fowls in the bat, etc.

Both animals and plants are possessed of a principle called *life*, which is essential to their existence, and distinguishes them from mere inert matter. All we know of this principle is that it exists—the cause lies hid, and must be referred to the immediate agency of an all-creative power. This life, or living principle, both in animals and vegetables, is sustained through the medium of organized matter. This matter or body must be fed and nourished by food adapted to its nature; and as long as the body continues in a state capable of being nourished, the life remains unimpaired; but whenever the matter composing the body becomes disorganized, and consequently incapable of assimilating its food, the life is endangered, and unless the functions can be restored or brought into proper action, the life becomes extinct. How important then is it to understand the whole organization of the system, and the *modus operandi* of food and medicine on all the organs, in order to keep the body in a healthy condition and prevent life from going out.

In the animal body there are certain organs whose office is to supply and receive nourishment and assimilate it to the various wants of the system. The stomach is the receptacle of food in the animal body. There, by means of the gastric juice, this food becomes changed into chyme, and then, by means of other secretions, it is formed into chyle, and finally, by coming in contact with the oxygen, inhaled into the lungs, a portion is turned into blood, which circulates through the arteries and veins into every part of the system. The food for the animal stomach, particularly in man, is prepared by artificial means.

In like manner the life of plants is sustained by food, different indeed from that necessary for animals, but such as is adapted to their nature; and they will grow and flourish, or they will languish and die, according as this food is given or withheld. But what is the food of plants? and how is it digested and assimilated, and made to circulate through the system, so as to become a part and parcel of the plant? We answer, that nature has provided for all these things

by a most beautiful arrangement. Their food consists of the soluble parts of the earth, and the numerous and small spongioles at the ends of the fibres or roots may be called the stomach. The food is digested—not *in* the stomach as is the case with animals, but *without* the stomach—by the rain and action of the atmosphere. In this way the particles of the soil that are too gross to enter the spongioles of the plant are decomposed, so that water can hold them in solution. The food is now in a state of digestion and can easily enter the spongioles of the roots, and thence by capillary attraction is made to circulate through the pores of the plant, as blood circulates through the veins of the animal. Now, as blood is said to be the life of animals, so this food or sap, as it is called, is the life of plants. By some mysterious or chemical action this sap is assimilated, and forms the bark, wood, leaves, and flowers of the plant.

Plants also, like animals, seem to have the power of *breathing*. The leaves supply the place of lungs, or rather they are the lungs of plants. As is the case with animals, when the atmosphere enters the lungs, it is decomposed; but with this difference, in animals the oxygen is retained, and the carbon is thrown off; in plants the carbon is retained and enters the circulation, while the oxygen is thrown off. In this way plants seem as a great purifier of the atmosphere. Plants and animals mutually assist each other, and contribute to each other's health and vigor—the one receiving as nourishment what the other rejects.

Another resemblance between plants and animals is, the *distinction of sex*. It is well known that the distinction exists in the vegetable world. All plants producing flowers and seed, have male and female organs, that is *stamens and pistils*. In most plants, these different organs are produced on the same blossom; but in many species, they are formed on different plants. These belong to what botanists call *diœcious*. Witness hemp, parsimmon, mulberry, &c. The pollen contained on the anthers of the stamens, is wafted by the wind, or carried by insects, from one plant to another, and fertilizes or impregnates the pistilate flowers. In this way, too, crosses are made and hybrids produced.

This is a curious and wonderful provision of nature, and answers many valuable purposes. It not only gives beauty and variety to plants, but, no doubt, has a tendency to perpetuate and strengthen the different species. We believe it to be a law of nature, however it may be accounted for, that extends both to the animal and vegetable kingdoms, that a cross is necessary to give strength and vigor to the system; and to propagate from the same species, for successive generations, without change, the offspring will degenerate, and die out, having lost their invigorating power.

Plants also, like animals, seem to be possessed of the faculty of *feeling* or *perception*. They feel the influence of heat and cold, of light and darkness. Some plants are so sensitive as to shrink from the slightest touch. Some will turn their tops to the sun, and follow his course through the day. Some will unfold their beauties to the light, and shut themselves up at night, as if to go to sleep and take their rest; and then in the morning, as if refreshed with sleep, they will expand their flowers to the genial influence of the sun's rays.

There are others, however, which reverse this order of nature, and like some animals sleep during the day, and are wide awake during the night.

There is something very curious, and to us short-sighted creatures very unaccountable, in plants. The food which they receive from the earth, becomes assimilated, and is carried up in the form of sap, and circulates through all the pores; and organizes every part of the plant. But how is it that the same nourishment produces some plants that are

pleasant to the taste, while others are exceedingly nauseous; some are harmless, others medicinal; some are wholesome as food, others are absolutely poison; some have hard fibre, some have soft; some have beauty of symmetry, while others are destitute of form; some are capable of enduring the rigors of winter, while others die at the approach of frost. And all these different results are produced, as far as we know, by one and the same cause, the sap or nourishment which they receive from the earth. This sap, as soon as it enters the circulation, undergoes some change, and accommodates itself to the peculiar nature of the plant. That the cause of this change exists in the plant, is evident from the fact that if a sweet apple be grafted on the stock of a sour crab, that sap which would have produced a sour apple, becomes so changed, as soon as it enters the grafts, that it produces a sweet apple. Again, how is it that the same sap, in its passage through different plants produces flowers of different colors? And not only so, but we often find that plants of the same kind and variety will have flowers of different colors; and even flowers of the same plant, and which we might suppose would be of the same texture in every respect, will have variegated flowers—spotted with every hue; and often these colors are placed upon the petals, in rings or circles, with as much regularity as if it had been done by the nicest pencil and the most skillful painter.

We know that everything is dependent on light for its color. The leaf is green, because it reflects the green rays of light; the rose is red, because it reflects the red rays, &c. Now, we might suppose that it was owing to some difference in the structure or texture of the leaf and rose that caused them to reflect rays of different colors; but what difference can there be in the same petal, to cause one part of it to reflect one color, and another part another? This is something that lies far beyond our ken. We simply know the *fact*, but the reason of it we do not know.

But from these inscrutable things, we may learn some very important lessons. 1st. How limited is human knowledge! 2d. How great, how good, and how wise must He be who has formed such a wonderful, beautiful, and harmonious system!

In all the works of nature, we see so many proofs of almighty power and infinite wisdom, that we may well exclaim with the Psalmist, "O Lord, how manifold are thy works! in wisdom hast thou made them all: the earth is full of thy riches." J. R. B.

Rosemont, Jan., 1858.

"CHEMISTRY FOR THE MILLION."

READ our articles, formerly under this head, but now under the shorter heading, "Chemical." We say this especially to young men. They will not fail to acquire a valuable insight into that most important science, even by what we can communicate on paper, with all the disadvantages of having no laboratory, no apparatus, no opportunity to look you in the face, to see your difficulties and remove them. A most sensible correspondent, one who has given many a valuable article for this journal, says:

"The articles on chemistry, that have appeared in the *Plough, Loom and Anvil*, and in the *Farmers' Magazine* for a number of months past, should be read by all. Those that have neglected to read them should do so now. They contain the very information that every person wants. I consider it very essential that a person understand the composition of the different gases and the relation they hold to one another, also to the soil and different farm products. The articles are plain and comprehensive, and adapted to the understanding of all classes."

FOR THE AMERICAN FARMERS' MAGAZINE.

THE WEATHER.

APPEARANCE OF BIRDS, FLOWERS, ETC., IN NICHOLS, TIOGA CO., N. Y., IN JANUARY, 1858.

By R. Howell.

Place of Observation, 42 degrees North, on a Diluvial Formation, about 40 feet above the Susquehanna River, and 800 feet above tide, according to the survey of the New-York and Erie Railroad.

Jan.	7 A.M.	2 P.M.	9 P.M.			REMARKS.
1	32	42	32	S.&N.	Cloudy.	Light rain in the afternoon.
2	20	39	30	South	"	
3	19	39	33	"	Fair.	
4	26	48	29	"	Clear.	
5	26	45	31	"	Cloudy.	[10 P.M. 6 inches fell.
6	31	36	33	"	"	Snow commenced about 12 A.M. and stopped at
7	29	26	20	West	"	
8	16	25	–0	N.&S.	Fair.	Bright aurora in the evening. At zero.
9	24	35	29	South	Cloudy.	
10	14	36	33	S. E.	Fair.	[P. M. Snow about gone.
11	36	53	43	South	Cloudy.	Rain commenced at 4 A. M. and stopped at 3½
12	37	39	24	N.&S.	Fair.	A few farmers plowing.
13	30	42	26	South	Cloudy.	
14	24	37	20	"	Fair.	
15	19	36	36	"	Cloudy.	Light snow commenced at 4 P.M.
16	39	43	36	N.&S.	"	Rain at intervals all day.
17	26	28	25	N. W.	"	
18	24	34	26	N.&S.	"	Snow squall.
19	27	32	23	S.&N.	"	Light snow in the night. Snow squall through [the day.
20	19	36	19	"	Fair.	
21	16	40	26	N.&S.	Clear.	
22	27	31	15	"	"	
23	12	33	23	S. E.	"	
24	30	42	33	"	Fair.	Rain in the morning before light, and in the A.M.
25	37	54	39	South	Cloudy.	Hard shower in the afternoon from the N. W.
26	48	46	32	S.&N.	"	A few farmers plowing.
27	33	40	32	North	"	
28	26	30	26	"	"	Light snow before daylight.
29	26	25	20	"	"	Snow squall.
30	22	22	20	N. W.	"	
31	14	22	9	"	Fair.	

You will perceive that I have changed the time of observation, to agree with the observations that I keep for the Smithsonian Institution or Patent Report.

In order to give the reader a better idea of our climate, where there is a day only one-fourth or one-half cloudy, like a number of hay days, I have substituted the word Fair instead of Cloudy, and cloudy when the day was all day cloudy, or more cloudy than clear.

In the last fourteen months there have been more dark, cloudy days than in the same length of time before, I presume, in twenty years. R. H.

FOR BLACK INK.

Two quarts of rain water, one half pound of nutgalls, three ounces gum Arabic, three ounces sulphate of iron; soak the nutgalls in three pints of the water; the gum arabic in half the remaining water warmed and kept so; the sulphate in the other half; let them stand in the several vessels forty-eight hours, then mix them and the ink will be ready for use in a short time.

It is cheaper and better for almost every family to make than to buy their ink; and if they will follow the above, they will be sure of having a good article.—ED.

Literary.

THE HERMITESS OF SOUTH SALEM.

AN ORIGINAL TALE OF THE REVOLUTION, FOUNDED ON FACT.

[Entered according to Act of Congress, in the year 1852, by J. A. Nash, in the Clerk's office of the District Court of the United States, for the Southern District of New-York.]

[*Concluded from the February No.*]

From the view of social politics in Ridgefield, which the few preceding pages disclose, it may well be assumed that Jim Smithson was disposed, after bringing home his young wife, to wait the course of events; and it was not until he found that the hand of sociality, if not of friendship, was freely extended to him and his wife, that he troubled himself about his neighbors. The cheerful, merry face of his bride, however, soon won for her from the young of both sexes a cordial welcome, which the decisions of the worthy committee, be they what they might, could not have either given nor long withheld; and a series of housewarmings and merry-makings in honor of the young couple, rapidly succeeded each other throughout the village. Uncle John arrived at Ridgefield when these festivities were at their height; and he soon found that through the affectionate premonitions of his adopted niece, his visit was likely to assume a character of unwonted gayety for one of his staid habits. All sorts of jaunts, parties, picnics, and junketings were planned, abandoned, replanned and executed, with an ardor in the executants worthy of special laudation.

At one of these parties it was proposed that an excursion should be undertaken at an early day to the neighboring mountain, "to see the Hermitess." This proposition led to an animated discussion among the young people—some of whom rejected it on the ground that the Hermitess was "a crabbed old witch, that was no better than she should be," whilst many others, with pertinacity maintained that they knew her to be "the kindest creature in the world," and in support of their assertion related instances in which she had been known to take care of little urchins, who had been overtaken by storms in their blackberry hunts on the mountain, and other kind offices that she had performed on various occasions.

Frazer had often heard of hermits, but not of ladies of that ilk; and his curiosity was raised to know more of the individual alluded to. He could get, however, but little satisfaction from the juvenile members of the party; who could only express their surprise, in manner if not in words, that one so old as he was, should be ignorant of the fact, that they had been familiar with all their lives, that an odd old woman lived in a cave on the mountain side; and therefore to their young minds there seemed nothing more extraordinary in that circumstance, than in a thousand other things of daily occurrence.

On the morning following the party, the subject of the Hermitess on the mountain was again introduced by Frazer; but his host could give him no more satisfaction than he had obtained on the preceding evening. Smithson, however, seeing Frazer's curiosity was strongly aroused, proposed to call on an elderly lady who had been an old friend of his mother, and who was an exception to the character that has been delineated of too many of the elder members of the fair sex of Ridgefield. Accordingly Smithson accompanied by Frazer, after breakfast, visited his old friend, from whom they obtained the following particulars.

Many years ago, possibly twenty or more, the Hermitess was for the first time discovered, living on the mountain side, in a small cavern, that was partially concealed by a projecting rock. Attempts were made to induce her to abandon her abode, and to learn something

of her previous history; but all such efforts were fruitless, as she shrunk as much as possible from communication with all persons with the exception of children. With children she would converse familiarly at times; and after a while many of the village girls visited her, to whom she was invariably kind; but even with them, as they grew up to womanhood, her manner became restrained and reserved, apparently with the motive to wean them, as it were, from repeating their visits; an effect which it usually produced. Her young visitors were frequently the conveyers of presents to her from their parents.

She occasionally brought to the stores in the neighboring villages, wild honey, blackberries and herbs, for sale; but at those times, her visits were never prolonged beyond the time necessary to fulfil the object of them, and all efforts to draw her into conversation were futile. She was never known to speak to any man living in the locality; but on a few occasions, she was observed to stop some passing stranger, and converse with him for a few minutes. On one of such occasions, when the subject of conversation happened to be overheard, it seemed to relate to political events of the day, intermixed with inquiries by her as to some two or three families whose names, not being those of people in that part of the country, made no impression on the person who repeated the conversation.

The only times at which she had been known to come amongst the surrounding community was on the Sabbath; when sometimes she would attend at Ridgefield church; leaving always immediately on the conclusion of the service, with a hasty step, to avoid contact with the congregation.

Seeing that she was inoffensive and harmless, pity gradually usurped the place of curiosity, in the minds of the good people of Ridgefield, and they very properly confined their interference with the poor women, to good offices; sending her by the intervention of their children presents of food, and clothing. Attentions which she was found invariably to return in some way, by small contributions from her little garden, or her beehive. In short, the opinion of the neighborhood was, that care or trouble of some kind had made inroads on her mind.

Such was all the story Frazer could learn of the Hermitess of the mountain. This, however, was more than enough to whet his curosity to the highest pitch. Nor was curiosity the only feeling induced by the recital. He had a warm heart, and his circumstances were easy, (for he had many years before succeeded to a patrimony beyond his wants,) and he could not repress the desire to make another attempt to relieve one so aged and so destitute, from the coming suffering, which he knew, in her situation, advancing years, with their weakness and incapacity, could not fail to bring upon her.

Some few days afterwards on a bright morning Frazer therefore, with Smithson and his young wife, started off on their walk to the mountain. The autumnal tints were just peeping through the summer's green foliage, tinging the trees with the forthcoming golden purple, orange, or brown shades that clothe the distant hill-side in autumn with the radiance of a garden. Passing up the mountain and crossing an elevated ridge, upon walking some way down the southern steep, a perpendicular face of rock presented itself, in the front of which was the cave. Some few rods of fertile ground, offering a slight declivity to the rising sun, ran along the rock, and formed a natural garden plot terminated in a sudden precipice. At the foot of this, at a distance of some eight or nine hundred yards, lay a sheet of water called Long pond. The north side of the rock disclosed the entrance to the cave, immediately before which, and so placed

as to form at the same time a natural door way and a side wall of the abode, lay an enormous mass of rock, which apparently had been, by some convulsion of nature, separated from the main body; and had thereby left the cavity which constituted the interior. Some peaches and vegetables of different kinds were growing in the piece of garden ground; and a very large and luxuriant grape vine had spread widely in all directions its branches, whose numberless purple clusters, reclining amongst its leaves on the surface of the rock, gave to it the character of rich velvet drapery studded with jewels.

From a fissure on the opposite side of the rock issued a crystal jet of water, whose sparkling column, reflected from its thousand falling drops the rainbow's varied hues, and gave a sprightliness to the surrounding scene which clothed it with life, and offered a marked contrast to the still solitude of the valley below.

As the party approached within sight of the cavern they saw a female, advanced in years, whose appearance was characteristic of her abode. Her covering could hardly be designated clothes. An assemblage of rags of all sizes, and colors, some sewed together, others apparently heaped on in one confused mass without shape or arrangement, covered her person from head to foot, being drawn tightly round the waist by a wide bandage. Her head was without any covering save that of her lank gray hair, which hung down in wild profusion, and half hid her countenance. She appeared to be engaged in tending a plot of ground a few yards square that adjoined her rocky domicile, in which some corn and other vegetables were growing.

Perceiving the visitors, she instantly quitted her occupation, and retired to her cavern. It had been arranged that Jim's wife should first approach the hermitage; and walking up to the door of the cave, Hannah Smithson saw the old lady crouched down in a corner, with her piercing eyes fixed on the door. Her face was wrinkled and furrowed, but the general expression, indicated a vivacity and quickness, which seemed to say that care and grief, had worked more than age, upon her frame. Notwithstanding this, the coarseness of character that her harsh mode of life and exposure to the elements had produced in her countenance, gave to it the appearance of extreme old age.

"Good morning, mother," said Hannah, addressing the old dame, "what a beautiful morning it is to range over the mountain; my husband and my uncle thought they would take a walk with me this morning, and hearing of your pretty place we have come to pay our respects to you. You must know I am a stranger to these parts, and I have only just come to live amongst you."

"Ah, young woman," replied she, "the world is bright to you, because you are a young, silly thing, that fancy the storms of life can never burst upon your head. I thought so once. But go;—God bless you, I wish you well; I have done with the world years ago, and only 'bide my time here. *That* is not in my hands, or I should long since have been beneath the sod you tread on. Please God it can not be long now."

The voice of the Hermitess was much less harsh than her exterior. She spoke in a melancholy tone, but with much emphasis, and an evident attempt was apparent to soften a hoarseness that oppressed her, as if she wished not to be thought uncivil or unkind, in thus summarily dismissing her visitor.

As she ceased to speak, Frazer and Smithson had gradually advanced to the door, and the former addressed to the Hermitess the customary salutation by which Hannah had introduced herself.

The old lady had, on concluding her address to Hannah, turned away, and consequently she had not seen the near approach of the speaker. The instant that Frazer's voice fell upon her ear, she

turned round with a sudden start, and looked him steadily in the face for a moment without uttering a word. Then turning back again she muttered to herself in a scarcely audible voice, "No, no, not him;" and heaving a deep sigh, added, "Long since gone; long, long."

"Mother," continued Hannah, "pray do not refuse to receive us. We come, not to intrude upon your privacy, but to comfort you, and if you will allow us, to offer you any little comforts that our farm can supply."

"Thank you," said she, "thank you, my good child. But I want nothing, I have too much now, here. The *end of time* is what I want; *that* you can not give me. But I must 'bide my time. There, God bless you—go!"

"Nay, good dame," rejoined Frazer, "you will not thus send friends away, for ——"

"Friends!" burst forth the Hermitess in tones of withering reproach, "Dare you, a man, address that word to woman? Friends! Fiends you mean! When was man the friend of woman? Man may be friend to man. Together like blood-hounds, may they hunt down the women kind for prey. Remorseless, merciless, selfish, Godless man may cherish in his breast the lust he calls love, and offer this, his treacherous lie, to woman. Talk not to me of man's friendship. Lord of the creation as he calls himself, he treats all creatures as his slaves, and woman as the greatest. His honor is his shame, for it scorns not to sacrifice the happiness of woman to the grossest sensuality with which he is endowed. No, no, *woman* can for woman feel; but never, never, *man!*"

Ceasing to speak, she sank down in a corner of her abode again, and buried her face in her hands.

Frazer was moved by the earnestness and acrimony of the old woman's address, and perceiving that it was vain to persist in his object, he resolved to refrain, for the present.

"My good lady," said he "since our presence is unpleasant to you we will take our leave. But you must permit me to assure you, that however unfavorable an opinion your experience may have induced you to form of my sex, you do mankind great injustice by your unreserved condemnation. It has been the privilege and joy of many generations of men to devote their lives and fortunes to the promotion of woman's happiness. Such would have been my joy, had heaven not in early life removed from this troublesome scene, the choice of my heart. Your troubles must indeed have been severe to induce you to have formed the opinions you have just expressed. But, remember, that an Almighty Will formed man and woman for each other. Were they not meet helpmates, He would not have formed them thus. Therefore be sure that, although many, alas, of both sexes err widely from the path of duty, upon the whole in this, as in all earthly things, 'whatever is, is right.' Farewell."

The party now commenced to retrace their steps, but as Hannah turned away she perceived the Hermitess beckon to her and advance towards the door. She waited, and the woman in a half whisper said,

"How that man talks!—What's his name?"

"Frazer."

She turned from Hannah and again sank down upon her seat, and Hannah hastened to join her companions. The friends returned home, and notwithstanding the discouraging nature of their visit, they resolved to repeat it at no distant day, and make another essay to improve their acquaintance with the Hermitess of the mountain.

It was not long before these intentions were acted upon, although from an immediate cause that they little anticipated.

One morning a little girl came to the farm, and said that she had been requested by the Hermitess to call and tell Mrs

Smithson that she was very sick, and wished to see her and her uncle. Hannah soon was ready, and in a few minutes after receiving the unexpected message, they were on the road to the mountain, where they found the poor woman, stretched on her only couch, *our mother earth*, upon a heap of straw and rags. By her side was a low stool, on which she motioned to Frazer to sit down, then placing her withered hand upon his knee, she fixed her eyes, suffused in tears, upon him.

"John Frazer," she exclaimed, "'tis no wonder that in these poor remnants of mortality, you can not recognize the once loved form of Sarah Butler, your affianced bride. Even my voice possesses no longer a tone by which it could be known. Not so with you, for your loved voice struck upon my ear like the welcome sound of some lost village chime. Long have I mourned you dead, and waited but to meet again *my only love* in heaven, where I am now fast going; for my strength is exhausted, and that release from earthly woes, for which I long have prayed, is granted now. My time is short, and I must quickly tell my tale; for I would not go hence, till you, my still-loved Frazer, have known your Sarah has proved faithful to her vows.

"Leaving the burning ruins of my home at that dread time that withered all our bliss, I hastened to the water side, and by the aid of a friendly fisherman I crossed the sound at night, and just at dawn of day set foot upon the opposite shore. My object was to seek my sister's farm; but worn out and exhausted by anguish and fatigue, against which a sense of present danger had until that time borne me up, as soon as I felt safe from further insult, my scattered senses left me, and I roamed about unconscious and unknown. How long I wandered thus, or where, I know not. A blank in my memory exists from the hour I left the boat, until I found myself lying,—where I lie now. My wanderings must have occupied both days and weeks, for my tattered clothes, and swelled and wounded feet, told plainly that my travels had been far. Doubtless I had lain down exhausted, and kind Time,—that truest of physicians, and the quiet stillness around me, had by degrees composed my burning brain, and thus restored my reason to its seat."

"When reflection had enabled me in some measure to recall the past, the extremity of my position, and the extent of its wretchedness became overwhelming. For several days I meditated upon it without any remission of my anguish. I remembered to have seen you shot down in the affray, to all appearance dead. I abhorred the world; I abhorred myself; and the only thought that dwelt upon my mind was, the most speedy means of terminating my existence. This feeling was, thank God, of short duration, for my duty to Him, reminded me that it was not for me to take away a life that He had given!"

"In some measure calmed by my reflections, I thought of my beloved sister's happy home; but my feelings were too intense, and my sense of degradation too deep, to allow me to subject myself, although an innocent victim, to the scoffs and gibes of a sensorious and pitiless world. Beyond my sister I had no ties that bound me to this life, whilst my bitter but short experience of its sorrows, was not likely to make me desirous to prolong it. From week to week I lived on here, satisfying at first the calls of nature for sustenance, with the berries and roots of the mountain; in rambling over which, I sought to drive away the dismal foreboding consequent on my forlorn state. In these rambles my enfeebled frame gained strength; and without a settled purpose, except the one of avoiding contact with a world I despised, I dragged on, month by month of my wearied existence. At length my haunts were discovered, and I resolved to adhere to a mode of life more congenial

to my desires than a return to civilization: and the better to sustain my character of a recluse, I stained my skin with berries, and assumed as much as I could the manners and appearance of age; efforts which the rigors and hardships inseparable from the life I led, soon rendered needless, as these told rapidly upon my tender frame. These hardships however I regarded not. Habit soon made most of them familiar to me, and consequently, they were unheeded; and when the bitter cup of suffering sometimes seemed too great for human nature to endure, I solaced myself by the thought that kind death would the sooner release me from these trials, and reunite me in heaven to *you*."

"Many have been the offers made to me to change my mode of life; but, John, my *pains* have been my only *pleasures*. The more intense my sufferings, the more vivid I thought my insight into eternity, where *you*, as in life, were the idol of my thoughts."

"The dear children of the surrounding country found me out, and have often seemed like ministering angels to my necessities. And in their innocent prattle, and affectionate sympathy, have I found my heart give proofs sometimes, that I was *woman* still. The honey from my mountain bees, and the produce of my little garden, have enabled my industry to yield me the means of buying bread, and of returning at least some acknowledgment for the kind presents that my young friends brought me. Thus have I lived rich, in all my wants; and—poor enough, to be left alone!"

"Since my early days of sorrow have passed away, and my mind by slow degrees recovered its serenity, my health has generally been good;—too good, as I thought,—and I have led a tranquil life."

"My Bible has been my constant friend; here it is, take it, and read it daily for my sake. 'Twill lead you, John, where I am going *before* you; but where I read it, in hopes to *follow* you, for I believed you there. Without that book, my lot would have been intolerable; with it, I have long had peace. From Job I learnt patience to submit to my lot, seeing that my sorry state was free from many dreadful ills he bore, and my burden thence seemed lighter. And when I pondered o'er the life of Him who was 'the man of sorrows and acquainted with grief,' and thought upon His sufferings for me, I felt remorse and shame at my selfish repinings. Read it, John, you will find in it directions for your guidance, examples for your imitation, promises for your encouragement, and eternal happiness for your reward! And if, at times, when cares, vexations, or bodily sufferings divert your mind from its first balance, and passion making plaything of your reason, causes you to give way to bursts of anger, (as, alas, I have too often done,) that book will remind you not 'to let the sun go down upon your wrath,' but to forgive freely, as you hope to be forgiven."

"Oh! who could have thought that I should on this bleak mountain side, live to see this happy day! To press the hand of him I have loved so well, and die at last in peace."

A tear ran down her cheek;—she sighed,—and her gentle spirit cast off its earthly coil!

Many is the tear that has since been dropped upon the tomb it was Frazer's care to consecrate to the memory of the Hermitess of South Salem.

Note.—The aim of the writer of these series of tales, of which the "Hermitess of South Salem," is the first, is not to amuse alone; but if it may be so, to lead the young *to reflect*. That "truth is often more strange than fiction," is an adage that every year verifies; and there are lessons to be learned by old as well as young, from many a strange matter of fact that passes unheeded, and by most unknown.

The name of the Hermitess is changed, (for the writer would not intentionally, should any members of her family now survive, recall events distressing to their feelings, to the attention of the present generation,) but the mode of life of the Hermitess, and the cause which led to its adoption, the description and place of her abode, and her religious feelings, *are facts*. She died about 1810.

There is a dignity of personal character manifested in the resolution of this poor woman, and in the

perseverance with which she adhered to it, that must command the admiration, as her sorrows must the sympathy, of all who read her history. And when it is borne in mind, that her conduct did not take its rise from misanthropic delusion; and, moreover, that her trust in Providence appears never to have been shaken by her woes, we may respect that intensity of sensibility which could face the rigors of near forty winters, in the cavern of a mountain side, rather than live in social intercourse with a world, whose verdict on the conduct of its denizens she knew is too often warped by conventionalities, rather than weighed in the scales of even-handed justice.

Editor's Table.

Book Notices, etc.—"A New Orchard and Garden; or the best way for planting, grafting, and to make any ground good, for a rich Orchard; Particularly in the North, and generally for the whole kingdome of England as in nature, reason, situation, and all probabilitie, may and doth appeare. With the Country Housewifes Garden for herbs of common vse, their vertues, seasons, profits, ornaments, varietie of knots, models for trees, and plots for the best ordering of Grounds and Walkes. As also the Husbandry of Bees, with their seuerall vses and annoyances, all being the experience of 48 yeeres labour, and now the third time corrected and much enlarged, by William Lawson. Whereunto is newly added the Art of propagating Plants, with the true ordering of all manner of Fruits, in their gathering, carrying home, and preseruation. Skill and paines being fruitfull gaines. *Nemo fibi natus.* Printed at London by J. H. for Francis Williams. 1626. Reprinted by Robert Pearsall Smith, Philadelphia. 1858."

A curious old book this. It is in the old black letter of a bye-gone age, and is a real curiosity. Mr. Smith has done well to give us a sample of what things our ancestors thought about horticulture, how they said them, and how they printed them.

On the BEST, SVREST, and Readiest way to make an Orchard and Garden, the 1st chapter treats of the Gardener and his Wages, the 2d of the Soyle, 3d of the Site, 4th of the Quantitie, 5th of the Forme, and so on.

Of the Gardener and his Wages, the author says:

"Whosoeuer desireth and endeuoureth to haue a pleasant, and profitable Orchard, must (if he be able) prouide himselfe of a Fruicterer, religious, honest, skilfull in that faculty, and therewithall painfull: By religious, I meane (because many thinke religion but a fashion or custome to goe to Church) maintaining, and cherishing things religious: as Schooles of learning, Churches, Tythes, Church-goods, and rights; and aboue all things, Gods word, and the Preachers thereof, so much as he is able, practising prayers, comfortable conference, mutuall instruction to edifie, almes, and other workes of Charity, and all out of a good conscience."

This was beginning right. The gardener must be religious, or his work would not prosper. Whether the master was to be religious, we have not read far enough to ascertain; but we suspect not over and above, by the wages he was to pay, though money was probably worth more, when there was no Bank of England in London to play the mischief with the currency.

This work is superbly "got up," as they say, and it contains a great deal of sage advice, more needed perhaps in those days than in ours, and yet very much of it such as we might profit by. To see the men in the picture on the title page sinking the spade to the very top of the handle, one would think that deep tillage is no modern invention.

The book contains 40 pages, and the price is $1. All who have a dollar to spare, and a curiosity for good old things, should buy it.

American Journal of Science and Arts, by Profs. B. Silliman and B. Silliman, Jr., and others, New-Haven; $5 a year and cheap at that. This is the leading, and for aught we know, the only work in this country, whose vocation is to extend the area of science by the yearly annexation of new territories. Men of progress and means ought to encourage, and we suppose do encourage it, as a great national work; one of which the country has reason to be proud.

Patent Office, Agricultural Department.—A much valued reader, in Philadelphia, calls our attention to this subject, one about which we find opinions widely differing, and on which we are not at present prepared to speak at large. We will only say here, whatever may have been the errors committed, we believe Dr. Browne, at the head of the department, to be sincerely and earnestly devoted to the great agricultural interest of the country. This we say the more cheerfully, because some remarks obtained a place in our last which did that gentleman injustice. Of the agricultural department we may have something to say hereafter, and we shall give something pro and con by others, better qualified than ourselves, perhaps, to speak on that subject.

The Berkshire (Mass.) Culturist.—This Journal, we see, has assumed the folio form, and become monthly instead of weekly; a good idea certainly. Agricultural Journals should be in a form to be preserved, and should not be too frequent in their issues. We have too much agricultural literature that is hashed up in a hurry, and too little that is deliberately and well considered before it is thrown upon the country. Dr. Reed, of the *Culturist*, has heretofore made a good weekly, and he will now make a better monthly, we have not one doubt.

American Veterinary Journal, by George H. Dadd and others, Boston. This is a reliable work, and should be in the hands of all who would know how to treat their horses and other animals well, in sickness and health.

We are reminded by this of our promise of an article on the horse's foot. It has not come. The promiser was an Englishman, and we suppose was offended by our *severe*, but, we think, *just* strictures on English misrule in India, with the accompanying wish that her rule abroad be materially mended, or very scarce on this continent. If there is sin in that wish we are ready to answer for it.

Message of the Governor of Ohio.—Somebody has sent us this document. We are sorry to see, by its statistics, that the sheep culture of that State is falling off. Undoubtedly the farmers of that great State know their own interests, and it would be folly for us to advise them to grow sheep, if they find it unprofitable. *But why should it be so???*

All can not be right with us, when the only State that has ever got half way into the sheep culture is getting out of it.

Western World and Dekalb Review; a spirited weekly hailing from Dekalb, Ill., and a contribution to that wide-awake character of journalism, in which the West *means* to beat the slower East. We are often agreeably surprised, in tracing the progress of American newspaper manufacturing, as manifested in our exchanges, from the West, the South-West, California, and even beyond, from Honolulu. The *California Farmer*, for example, is in our judgment one of the very best agricultural papers in the English language.

Transactions of the Essex County (Mass.) Agricultural Society. — This comes to us with the well known direction of John W. Proctor, who we fear is a little off the track in writing so discouragingly of the sorgho, but whose well known love of agriculture will hoist

him on again very quick, if he finds himself off. The book—too large to be called a pamphlet—contains 208 pages, which is its least recommendation, the value of the matter being the principal. For half a century that society has done better than many sisters that have done well.

American Farmer.—This oldest agricultural journal in our country, is on our table; and we find it not so very old after all, but well filled with matter, fresh, earnest and useful.

Reports of Committees of the Massachusetts Horticultural Society.—This is a valuable document, of 104 pages, for which the society and its secretary have our thanks. Josiah Stickney is President; E. S. Rand and Eben Wright, Vice-Presidents; Wm. R. Austin, Treasurer; Eben Wright, Corresponding Secretary; F. L. Winship, Recording Secretary; John L. Russell, Prof. of Botany and Vegetable Physiology; J. W. P. Jenks, Prof. of Entomology; and E. N. Horsford, Prof. of Horticultural Chemistry.

Germantown Telegraph, New-England Farmer, Country Gentleman, Maine Farmer.—These are the leading agricultural journals in their respective States. We never take up one of them without wishing that all the farmers in its State had it. If they want another, it is true, and we will not deny it, that we have no sort of objection to their having ours.

Under the same category would we put the *Michigan Farmer, the Wisconsin Farmer, the Ohio Cultivator and Ohio Farmer, the Southern Cultivator*, and a host of others on our exchange list, leading agricultural journals in their several States. We have a sort of a notion in our head, that the farmers of the country would do well to take at least two agricultural journals, one for their own State and one for all the States, national in character. It may be because we are selfish, wishing to come in for the second chance. Every one must judge of that.

Southern Progressionist; Published at Newnan, Ga., and Pulaski, Tenn.; J. M. H. Smith, editor; H. A. Livingston, publisher; at $1 a year in advance, $1 50 in six months, and $2 at the end of the year. That is right; make them pay in advance; one dollar in hand is better than two always coming, both for the payer and the payee, for the former because a man respects himself—feels better—when he has paid a just claim than if he shirks it, besides that he has less to pay; and for the latter, because it is a real comfort to pay the hard working printer and the paper maker promptly, and so pass it along. We will promise to pass along a good many bits of comfort, if those old subscribers, who used to have this work on tick, will square up by mail. Bless them, if they knew how much good it would do us, they would not wait to be asked; we think better of them. But to the *Progressionist.* It is an earnest, progressive work as its name imports; but it is universalist in its character, its theology differs, we presume, from that of most of our readers, and certainly from ours, and we could not therefore recommend it, otherwise than as we heartily approve of an unbiassed investigation of all important subjects, nor to others than those capable by age and reflecting habits of such investigation. Seriously, our fears are that its progress will not be in the right way.

Fish Guano.—This article, as manufactured at Southhold, L. I., (see advertisement) is, we believe, new in this country. Mr. Brundred, the manufacturer, has explained to us at length the process by which it is made; and we can not see why the fertilizing matter contained in four or five tons of fish should not be retained in the one ton of guano made from them. It would seem that a very powerful manure must be the result. But we know nothing of it practically. The sea is certainly a prolific source of fertility, if we can work its productions into a concentrated, porta-

ble manure. We would recommend that trial be made of this fertilizer, as the only sure test; and if the farmer wishes to be on the safe side, as he ought certainly, let him try it on such a scale as can not in any event result in an inconvenient loss. Because there has been a great deal of adroit dealing on the part of manure dealers, by which farmers have been swindled, it does not follow that they should condemn untried every article that is offered.

Pullen's Catalogue of Fruit and Ornamental Trees, Vines, &c., Hightstown, N. J.—We have seen Mr. Pullon at his home, and we believe him to be an accomplished gardener and a true man. He offers a rich variety in his line.

After so much said about our cotemporaries, it will not be deemed amiss if we say a word for ourselves. One reason why so many valuable articles are crowded out this month is, that during the first half of February, we were resolved to enlarge the *Farmer' Magazine* from 64 to 96 pages. We had actually procured and sent to the printer the extra paper for the purpose. But although subscribers are coming in well and we have nothing to complain of, yet in the present aspect of the times, we feared to venture the increased expense just yet, but hope to be able to do it at no distant day. In the meantime, will not our subscribers aid our design by promoting the circulation of this work in their respective neighborhoods? To encourage an effort of this kind, we will say, that any one now a subscriber may add another to our list by sending us the club price, $1 50; and, as our January and February numbers are nearly exhausted, we will agree to send the work for the balance of the year, commencing with April, for $1, forwarded to this office. Clergymen of all denominations, who from an interest in agriculture desire a work of the kind, may order this for $1 a year. Give us a lift, friend, in your various localities, and we pledge you that we will either give it to all next year for $1, or, what is more probable, will enlarge it before this year is out to once and a half its present size.

U. S. Ag. Soc.—We omitted, owing to a press of matter, to say much at the proper time of the late exceedingly interesting and important meeting of this society at Washington, at which Col. Wilder, its able, earnest and devoted president resigned, and another, Gen. Tilghman, equally energetic and efficient, we have good reason for believing, was chosen in his place. The Sorgho and Imphee question was ably discussed, and we now regard it as settled that both plants will be of great value to our agriculture; but which will prove best for each latitude of our widely extended country, we do not think has yet transpired.

In our last we spoke with reserve of Gay & West's "Warner's Patent Pump," and "West's Double Acting Water Ram," as we always mean to speak of things about which we have the least doubt. We have since learned that the pump is an excellent one, beyond all question. See advertisement.

A pretty little Blunder.—The printer has made us, page 162, March number, advise our readers to paint their houses, barns, fences, etc., now in autumn. The secret of it is, that we did so advise four months age, and this item has lain over with the printer till this time. But editors and printers both have their vexations; we must forgive them and they have to forgive us; and our readers must remember the advice till sol, with his fiery horses, has gone nearly round the circle again. They can afford to remember it, for it is worth knowing that paint put on in the fall, does them nearly twice as much good as in spring.

Peabody's Premium Prolific Corn.—We have before us a circular of this new production; and although we are unprepared to speak positively with regard to

it, we are favorably impressed; and were we in the active line of farming, we would certainly address Charles A. Peabody, Columbus, Ga., for further information. Whatever may be its merits, we are satisfied that Mr. Peabody has yet used all proper precautions to keep it perfectly pure, and that last year he grew 2360 bushels on 25 acres, so isolated as to avoid all danger of hybridization. His certificates, by reliable men, fully establish these facts. But whether Georgians can not and ought not to grow at that rate, of any corn, on their land and in their sunny climate, is more than we know.

A Correction.—In our February number we published an article without examining it as carefully as is our wont, partly owing to a press of engagements at the time, but more to our great respect for its author, reflecting, with something more, perhaps, than might be set down to good natured pleasantry, on somebody, somewhere, by the name of Browne. The agreeable acquaintance we have had with the writer of the following, and our high esteem for his character and services, render us doubly cheerful in complying with his request to correct an error:

"Sir:—In the February number of the *American Farmers' Magazine*, I notice an article entitled, "A Theory Spoiled; or are South Downs Pure Blooded Sheep? By C. M. Clay, of Kentucky," in which there are thrown reflections upon a person bearing the name of Brown, to which are prefixed my initials. As the individual referred to was Mr. A. P. Brown, of Philadelphia, you would oblige me if you would make a proper correction at your convenience.

"Yours, respectfully,

"D. J. Browne.

"J. A. Nash, Esq.,
Editor *Amer. Farmers' Magazine.*"

To show how the article on the red cattle of New-England is appreciated by a body consisting largely of practical farmers, we cheerfully copy the following from the proceedings made by order of the American Institute. The article was read before the Farmers' Club of that society;—

American Institute Farmers' Club.

Regular meeting, Feb. 16, 1858, *H. Meigs, Secretary.*

Mr. Alanson Nash, one of the earliest members of the Farmers' Club, and who has on all suitable occasions manifested his appreciation of it by sustaining it, has, by particular request, undertaken with much industrious research among the scattered fragments of knowledge to give us a history of and relative to the now well marked and acclimated and well taught red cattle of New-England, and has produced in his essay on that subject all that may be useful or desirable in relation to this first and nobly created American stock of cattle. He has done for this very useful purpose what our Washington Irving did long ago in his analectic magazine for literature, according to his own motto, "Sparsas Colligere Flores." Tuscany has for centuries been celebrated for her spotless white cattle, looking like snow on her green meadows; but our Amer-Red is worth more than that race for work and beef ten to one.

CHANGE OF NAME.

The writer of one of the most sensible articles in this number says:

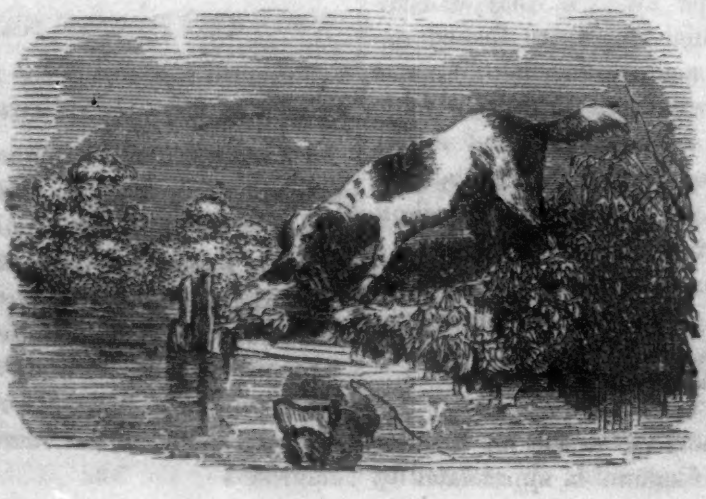
"I am not a whit behind *The Independent* (Jan. 14) in gladness at the changes you have made in title, &c.; neither do I any less fervently hope and trust that you will find *increased favor* and a *larger field* of usefulness. I should be happy to contribute to this end, and will whenever I have an opportunity." Will not others of our friends go and do likewise?

Children's Corner.

In Æsop's time, when the beasts talked, a wolf and a fox, seeing a dog, fat, sleek and well provided for, while they were lean and hungry, asked permission of the dog to accompany him to his home. But seeing his neck worn, and learning from him that it was in consequence of being chained, they concluded to go back and live in the woods.

The children may exercise themselves in guessing at the moral of this fable.

A Stag, drinking from a fountain, saw himself in the water. His horns appeared long, branchy and beautiful. He was proud of them. His legs seemed slender and ugly. He was ashamed of them. But when the dogs bayed, his legs would have saved him, but his horns, entangled in the trees caused his ruin.



A dog with a piece of meat, saw his shadow in the water, and trying to get the other dog's meat, he lost that which he had.

Moral.—"Much wanted more and lost all."

When we want more than belongs to us, we sometimes get less than we should have if less craving.

☞ "You charge a dollar for killing a calf," said a planter to an old negro. "No, no, massa; charge fifty cents for killum calf, and fifty cents for the *know how!*"

The negro was right; and now if the children will learn well at their schools, and read good books and periodicals at home, they will "*know how*" to do a great many things that are well paid for, and will feel the benefit of what they learn now all their life, in being of more value to themselves, to their friends and their country.

Domestic.

CORN BREAD.

Not many years ago, half the bread eaten in New-England was made of corn and rye meal; now the majority of families see nothing but wheat bread, except on very rare occasions, from one year to another. The farmers of the West, the planters of the South, live on corn bread, and sell their wheat to us, because corn bread costs only half, or less than half as much as wheat bread. Yet there are thousands of poor families in New-England, who do not know one week where the next week's supplies are to come from, who would feel a sort of degradation in living on corn bread; and if they resort to it occasionally, eat slyly and by stealth, that it may not be known that they are so poor as to live on Indian meal.

There is a mistake in this. There is nothing more palatable than corn meal properly cooked. There are a variety of articles for the table that may be prepared from it, that are highly toothsome, and will be preferred to anything else by many people, almost universally by the children. Here is an opportunity for considerable economy and one at the same time productive of health. Let Indian meal be partially substituted for flour, and the expenses of the table can be very considerably reduced by this one change.—*Springfield Republican.*

Yes; and there will be more health and strength, better looks, a more manly or womanly personal development, greater energy and longer life. Our Southern brethren, we believe, have not yet repudiated hominy and hoe-cakes; and in this they are wiser than the Yankees, taking the word to mean all north of them.—Ed.

TO CATCH OWLS.

If troublesome to your poultry, set a steel trap on the top of a pole, near the hen roost, and they will certainly be caught.

TO MAKE STICKING SALVE.

Three pounds resin, half a pound of mutton tallow, half a pound of beeswax, and a tablespoonful of sulphur; melted, poured into cold water, and worked and pulled an hour.

KEEPING CIDER SWEET.

A pint of mustard seed, put in a barrel of cider, will preserve it sweet for a number of months. I have drunk fall cider in the month of May, which was kept sweet by this means.

KEEPING POULTRY.

The late Judge Buell kept poultry in the winter more than two months, in a perfect state of preservation, by filling them after they were dressed with powdered charcoal, and then hanging them in an airy loft.

TO DESTROY MITES IN CHEESE.

A piece of woolen cloth should be dipped in sweet oil, and be well rubbed on the cheese. If one application be not sufficient to destroy the mites, this remedy may be used as often as they appear. The cheese shelves should be well washed with soap and water.

TO KNIT HEELS.

To knit the heels of socks double, so that they may last twice as long as otherwise, skip every alternate stitch on the wrong side, and knit all on the right. This will make it double, like that of the double ply ingrain carpet.

Miscellaneous.

RIGHT NAMES.

If a man should set out calling every thing by its right name, he would be knocked down before he got to the corner of the street.

FAT AND LEAN.

A man praising porter said it was so excellent a beverage, that it always made him fat.

"I have seen the time," said another, when it made you lean."

"When?" asked the eulogist.

"Last night against the wall."

LARGE CROP OF OATS.

We learn that on the farm of Jacob Lee, just west of this town, there was threshed out, as the product of one acre, the immense quantity of *one hundred and thirteen bushels and one half of oats.* We never heard of a crop to exceed this, and we should be inclined to doubt the fact, were it not substantiated by the best of testimony.—*Marion Rep.*

☞ Some one has beautifully said of those who die young, that "they are like the lambs which the Alpine shepherds bear in their arms to higher and greener pastures, that the flocks may follow."

☞ Health comes of itself; but we are at great pains to get our diseases. Health comes from a simple life of nature; diseases from an artificial life.

☞ A French paper states that the American engineers who undertook, by means of a special apparatus, to raise the Russian ships of war sunk in the harbor of Sebastopol, have given it up and returned to Constantinople, declaring that their contract can not be performed, except at an enormously disproportionate cost.

☞ There was a volcanic eruption on one of the Sanquiir islands, near Borneo, in March last, which destroyed a whole village of 3000 persons, besides an immense amount of growing rice. The emission of lava, stones and ashes was so great as to obscure the sun and produce total darkness. A violent hurricane and lightning accompanied the eruptions.

☞ A $500 lump of gold has been taken from a mine in Cabarras County, N. C.

☞ There are 50,051 rice plantations in the South, the annual product of which is worth about $4,000,000.

It costs twenty-six dollars an hour to light the new hall of the House of Representatives at Washington, with gas.

☞ The cost of printing for the 34th Congress to the United States Government, is said to have been two millions of dollars, and to have netted a profit of half a million to the fortunate individual possessing the contract.

☞ The amount expended by American travelers in Europe is estimated at over $10,000,000 annually.

☞ "Good morning, Jones; how does the world use you?"

"It uses me up, thank you."

☞ There is no part of husbandry which is more neglected than that of planting trees.

☞ Truly great men have ever been the workers of the world. An English writer in a paper upon Andrew Fuller, says: "Walk around the cathedral aisles where the memories of the great dead are found, and you will see the tombs at which the crowd stop and hold their breath in reverence, are not the tombs of dreamers but of workers—all of workers. Mark them as they pass from statue to statue! They come to Shakspeare, and the memory of pleasant hours of quiet enjoyment finds its way to the face. But moving on to Howard, see how they pause before the tall figure with a brother's love beaming from the cold marble, and the chained prisoner at his side, while the lifeless memorial of a love yet warm and living, bids the big tear steal unchallenged to its shrine.

☞ There is a medium between an excessive diffidence, and too universal a confidence. If we have no foresight, we are surprised; if we are too nice we are miserable.

Jacob Strawn, the celebrated cattle dealer and landholder of Morgan county, Illinois, has recently sold off a corner of his farm in that county, being 3300 acres, at $30 per acre, amounting to the insignificant sum of $99,000. He has made several other sales of land lately, and yet has ground left sufficient to raise enough to feed the whole population of Illinois.

OCCUPATION.

What a glorious thing it is for the human mind! Those who work hard seldom yield themselves entirely up to fancied or real sorrow. When grief sits down, folds its hands, and mournfully feeds upon its own tears, weaving the dim shadows that a little exertion might sweep away, into a funeral pall, the strong spirit is shorn of its might, and sorrows become our master. When troubles flow upon you dark and heavy, toil not with the waves, wrestle not with the torrent; rather seek, by occupation, to divert the dark waters that threaten to overwhelm you in a thousand channels which the duties of life always present. Before you dream of it those waters will fertilize the present and give birth to fresh flowers that may brighten the future—flowers that will become pure and holy in the sunshine which penetrates to the path of duty, in spite of every obstacle. Grief, after all, is but a selfish feeling, and most selfish in the man who yields himself to the indulgence of any passion which brings no joy to his fellow-man.

LIFE.

The mere lapse of years is not life. To eat, drink, and sleep; to be exposed to darkness and light, to pace around in the mill of habits and turn the mill of wealth, to make reason our book-keeper, and thought an implement of trade—this is not life. In all this but a poor fraction of the unconsciousness of humanity is awakened, and the sanctities still slumber which make it worth while to be. Knowledge, truth, beauty, love, goodness, faith, alone can give vitality to the mechanicism of existence; the laugh of mirth which vibrates through the heart, the tear which freshens the dry wastes within, the music that brings childhood back, the prayer that calls the future near, the death which startles us with mystery, the hardship which forces us to struggle, the anxiety that ends in being.—*Chalmers.*

Markets.

Markets.—Want of space obliges us to omit our monthly review, and to stop with very few words on the markets.

Friday, February 19th, there is considerable activity in the general produce market. Business rather active for the season.

The following table will show the difference between the currency for the leading kinds of Breadstuffs yesterday and a week previous:

PRICES OF BREADSTUFFS IN NEW-YORK.

	Feb. 10.	Feb. 17.
Superfine St. Flour..	$4 15 @4 25	$4 15 @4 25
Extra State.....	4 25 @4 50	4 30 @4 50
Super. Ind. & Mich.	4 15 @4 30	4 15 @4 30
Super. Ohio.....	4 30 @4 40	4 20 @4 30
Fancy Ohio.....	4 35 @4 45	4 40 @4 50
Extra Ind & Mich...	4 40 @6 00	4 30 @6 00
Extra Ohio.....	4 60 @6 50	4 60 @6 50
Fancy Genesee.....	4 30 @4 40	4 30 @4 40
Extra Genesee.....	4 75 @6 50	5 00 @7 00
Extra Missouri.....	5 00 @8 00	5 00 @8 00
Super, to Ex. Cana'n	4 15 @6 00	4 20 @5 50
Mixed to Ex. South'n	4 50 @7 50	4 50 @8 25
Rye Flour.....	3 00 @3 87½	3 00 @3 87½
Corn Meal.....	3 00 @3 50	3 00 @3 50
White wheat ℔ bush.	1 10 @1 40	1 10 @1 42½
Red wheat ℔ bush..	99 @1 20	97 @1 20
New Corn.....	65 @ 67	65 @ 68
Northern Rye.....	68 @ 70	70 @ 72
Barley.....	70 @ 78	70 @ 78
Western Oats.....	44 @ 45	44 @ 45
State Oats.....	41 @ 44	41 @ 44
Jersey & Penn. Oats.	38 @ 39	38 @ 39
Southern Oats.....	27 @ 35	27 @ 35
White beans ℔ bush	1 87½@1 40	1 87½@1 40
Canada peas ℔ bu..	1 20 @1 25	1 10 @1 15
Black-eyed peas ℔bu	3 12½@ —	3 12½@3 25

Cotton opened actively yesterday at advancing prices, but closed heavily, with a downward tendency. The week's sales amount to about 12,700 bales. Our available supply is 10,927 bales, against 83,285 bales same period last year. The receipts at all the shipping ports, to latest dates this season, have been 1,607,290 bales against 2,105,210 bales to the corresponding period of last season. The total exports from the United States so far this season have been 880,030 bales, against 992,206 bales to the same date last season. The total stock on hand and shipboard in all the shipping ports, at the latest dates, was 673,899 bales, against 770,757 bales at the same time last year. The stock in the interior towns at the latest dates was 133,782 bales, against 109,100 bales at the corresponding date a year ago.

In reference to the probable yield of the cotton crop, Neill, Brothers & Co. state that "2,800,000 is now perhaps the favorite estimate."

Provisions have been less freely offered, while they have been in good demand at rising prices. The Pork packing trade at Cincinnati is diminishing, the season being very nearly closed, and the receipts of Hogs having fallen off to about 12,000 head.

The market has been very quiet for all kinds of Wool during the past week. The demand has been less active, and buyers have manifested very little disposition to purchase, unless at reduced prices.

Tobacco is in pretty fair request at about previous figures.

In the *Live Stock Market* the average price of beeves war ½ to ½c. lower this week than last. Prices this week from 12½c. for premium cattle to 8c for poor. Price of Milch Cows with calves unchanged, from $30 to $60, less than $30 for very mean, and more than $50 for uncommonly fine. Veals from 6½ to 7½c. for good, and 5 to 6c. for ordinary.

Receipt of Sheep and Lambs moderate, and prices unchanged. Sales ranging from $3 to $5 50, and a few as high as $6 50. Receipts of Swine moderate, with an upward tendency in price, varying from 5¾ to 6¼c. gross, and from 6 to 7½c. ——.

Advertisements.

P. MANNY'S PATENT ADJUSTABLE SELF-RAKING REAPER AND MOWER COMBINED.

MANUFACTURED BY MANNY & Co., FREEPORT, ILL.

Being three machines in one, simply adjusted and perfectly adapted to either purpose. These are important features not to be found in any other machine, and need only to be seen to be appreciated.

THE VERY BEST

Agricultural Paper in New-England.

THE NEW-ENGLAND FARMER is now generally acknowledged to be superior to any other publication of its class in the New-England States, and equal in merit to any in the country. Its circulation is unequalled by that of any other agricultural paper in New-England.

It is published weekly, on fine paper, and has just been put upon new type throughout. It is ably edited by SIMON BROWN, a thorough and practical farmer, and has the best corps of intelligent correspondents that can be found in New-England. Among these are Hon. HENRY F. FRENCH, of New-Hampshire, Hon. F. HOLBROOK, of Vermont, WILSON FLAGG, author of "Studies in the Field and Forest," &c., &c.

Besides the agricultural matter, the Farmer contains a complete digest of the news of the day, a condensed report of the markets, a large variety of intercsting and instructive miscellaneous reading, and everything that can make it a welcome weekly visitant at the fireside of every farmer in the land. Also published at the same office,

NEW-ENGLAND FARMER, MONTHLY.

This is a pamphlet containing 48 pages in each number, printed on fine book paper, beautifully illustrated, and devoted entirely to subjects connected with the farm.

TERMS.—New-England Farmer, Weekly, $2 a year.
New-England Farmer, Monthly, $1 a year.

NO CLUB PRICES, and no discount in any case, as our rule is to serve all alike. Send for a specimen copy, and judge of the merits of our publications for yourself.

JOEL NOURSE,
Publisher New-England Farmer,
Mar. 3t* No. 13 Commercial St., Boston.

Fish Guano.---$35 Per Ton.

THE attention of Farmers and others is called to the FISH GUANO manufactured by the Long Island Fish Guano and Oil Works, at Southold, Long Island. It is composed of the *Bones* and *Flesh* of Fish, after extracting the oil and water, and has been thoroughly tested in England and France, and from testimonials received, is found to be equal to Peruvian Guano and other manures; is free from smell and not injurious to health. Price in bags, $35 per ton. Pamphlets containing full particulars and testimonials may be had on application to

BRUNDRED & ROGERS,
Mar. 1y. 60 Pine street, N. Y.

Illustrated Book of Pears.

JUST published and for sale by A. O. MOORE, No. 140 Fulton St., N. Y., and STARR & CO., 4 Main St., New-London, Conn., the above valuable work, containing plain, practical directions for Planting, Budding, Grafting, Pruning, Training, and Dwarfing the Pear-Tree; also instructions relating to the Propagation of new varieties, Gathering, Preserving, and Ripening the fruit; together with valuable hints in regard to the Locality, Soil, and Manures required for, and best arrangement of the Trees in an Orchard, both on the Pear and Quince stocks, and a List of the most valuable varieties for Dwarf or Standard Culture, accurately described and truthfully delineated by numerous beautifully colored engravings.

The above work, beautifully illustrated, should have a place in every family where a taste for good fruit prevails in all its choice varieties.

Orders promptly executed. Dec. tf.